

THE COMMUNITY PLANNING GROUP'S GUIDE TO THE IMPACT
OF
HIV/AIDS ON KANSAS RESIDENTS

Bureau of Epidemiology and Disease Prevention
Kansas Department of Health and Environment
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This AIDS Ribbon was designed by the Kansas
Capital Area Chapter of the American Red Cross
to raise hope and awareness.

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GLOSSARY OF TERMS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
Case Count	The number of people with AIDS or HIV
CDC	Centers for Disease Control and Prevention
Confidence Interval (CI)	The computed range in which the true value of a variable is believed with 95% assuredness to lie
CPG	Community Planning Group
Early Adopters	Classification by Everett Rogers in <i>Diffusion of Innovation</i> , used to describe the second group of people to adopt innovative ideas presented as behavioral modification ideas. This group accounts for the first steep decline in transmission by a particular mode of exposure.
ELISA Test	Enzyme-Linked Immuno-Sorbent Assay; A blood test that indicates the presence of antibodies to HIV. The HIV ELISA test does not detect the disease AIDS, but indicates if viral infection has occurred.
Epidemiology	The study of disease patterns in populations
HAART	Highly Active Antiretroviral Therapy
HARS	HIV/AIDS Reporting System
Het Sex	High-risk heterosexual sex between a male and a female. As used in this profile, it generally refers to the risk behavior of sex with a bisexual male, IDU or person known to be HIV positive, following the CDC definition. Heterosexual sex as a mode of exposure refers only to high-risk heterosexual behavior; all other heterosexual sex is classified as NIR.
HIV	Human Immunodeficiency Virus
IDU	Injection drug use; illegal drugs, or drugs being used without prescription, administered into the body with a needle.
Incidence	The number of new cases in a specific time
KDHE	Kansas Department of Health and Environment
Mean	Arithmetic average

Median	The “middle point”. When cases are ranked in an order, the median refers to the point where half the cases are above and half are below. It describes the distribution of the data differently than the mean because extreme values have less influence.
MSM	Men who have sex with men, whether they identify as bisexual, heterosexual, or homosexual. As used in this profile, it generally refers to the risk behavior of unsafe, unprotected male-to-male sex.
NIR	No Identified Risk
Opportunistic Infection	A disease caused by agents that may be in our bodies or in the environment, but generally cause disease, or more severe disease, only when the immune system becomes depressed.
Prevalence	The estimated total number of cases at a specific time.
Prevalent Cases	For this document, prevalent cases are those people presumed to be living with HIV or AIDS. If no date of death is reported to KDHE for an individual, the individual is presumed to be still living.
Rate	The proportion of people with a disease over a specific time period.
Relative Risk (RR)	The ratio of disease in those exposed to disease in those unexposed. Used in this article to indicate the likelihood of developing HIV or AIDS.
SHAS	Supplement to HIV and AIDS Surveillance Project
Statistically Significant	A mathematical test used as a guide to determine whether the changes seen are likely due to chance alone or to some other factor(s).
STD	Sexually Transmitted Disease
Surveillance	The ongoing, systematic observation of a population for rapid and accurate detection of changes in the occurrence of particular diseases.
Western Blot	A blood test used to detect the HIV antibody. It is often used to confirm the results of an ELISA test. It is more specific and more expensive than an ELISA test.

EXECUTIVE SUMMARY

This is the eighth HIV/AIDS epidemiologic profile defining the epidemic in Kansas and outlining the impact of HIV/AIDS in Kansas. This is the fourth report to specifically address the status of HIV in the state. The Kansas Department of Health and Environment (KDHE) began monitoring AIDS in 1983 and July 1, 1999 marks the beginning of HIV confidential name-based reporting. This report describes and analyzes HIV and AIDS cases reported as of December 31, 2002 and is primarily an update of the 2002 profile. The primary purpose of this profile is to provide statistical information for those who plan and implement prevention, intervention, and care programs for HIV-affected individuals in Kansas. The Kansas HIV/AIDS Community Planning Group uses the information in this Epi Profile as one tool for decision-making and allocation of prevention funds.

This profile uses the date of report to KDHE as the basis for all inclusion and exclusion criteria for AIDS and HIV cases. Therefore, unless otherwise indicated, any analysis based on dates can be assumed to be based on the report date for each case. Use of the report date is more likely to be influenced by definition changes and external factors than the date of diagnosis. However, the state prevention and intervention activities are based on data referencing the report date and therefore are more applicable to statewide analysis. The external limiting factors such as delayed reporting by providers and/or data entry delays could potentially misrepresent the current burden of the epidemic. These factors should be considered when subjecting data to further analysis.

Statewide trends and highlights

In 2002, 57% of new AIDS cases were diagnosed with HIV less than one year before their AIDS diagnosis. Major concerns have been raised in the past regarding the missed opportunities for prevention and control based on statistics indicating that most patients convert from HIV to AIDS within one year of their initial HIV diagnosis. This seems to indicate that most people are being tested late in the course of their infection.

Kansas is considered a low prevalence state for HIV and AIDS and therefore all percentages and rates should be interpreted cautiously. There have been 2,453 cases of AIDS reported in Kansas since 1983. Of those, 55 cases were reported in 2002. There have been 390 cases of HIV reported in Kansas since July 1, 1999. As of December 31, 2002, there were 1008 reported persons with AIDS and 382 reported persons with HIV living in Kansas. The AIDS rate for Kansas for 2000-2002 averaged 3.3 cases per 100,000 people per year.

Based on the year of report, the overall trend shows a continuing decrease in the number of AIDS cases reported beginning in 1994, despite minor increases in individual years. The steep decline in the most recent year is more likely due to reporting artifacts rather than an actual decline in the burden of the disease. However, the overall decrease previously mentioned is potentially due to an improvement in therapy for newly diagnosed HIV cases. Additionally, it is possible that improvements in prevention efforts are proving to be successful.

The disproportionate effect of HIV and AIDS on men continues to exist nationwide, but simultaneously continues to decrease in magnitude. As reported in the last Epi Profile the number of female cases has gradually grown over the last 10 years and in 2002 females continued to account

for more than 16% of all Kansas AIDS cases. Even in the past three years females accounted for nearly 15% of all Kansas AIDS cases compared to less than 6% of the cases diagnosed before 1991. Black women accounted for more than 37% of the Kansas cases of AIDS in women from 2000 to 2002 while only accounting for 6% of the Kansas population. Additionally, during this time-period 26% of all black AIDS and HIV cases in Kansas were women. Females represented more than 20% of the HIV cases reported in Kansas. Again, it is difficult to draw many conclusions based on this data due to the small number of cases in Kansas.

People of color represent a disproportionate number of Kansans diagnosed with AIDS. Out of 2,453 cases of AIDS diagnosed in Kansas since 1983, 433 were Black or 18%. Blacks currently represent approximately 6% of the population in Kansas, but 26% of the AIDS cases diagnosed between 2000 and 2002. This increase above the average percentage represents one area of concern. Additionally, although there has been a decrease in the rates in Kansas for all races from 2000 to 2002 the decrease among Blacks is less pronounced. The decrease may be due to the reporting artifacts rather than a decrease in the actual burden of disease.

Nearly 40% of AIDS cases and 42% of HIV cases diagnosed in Kansas between 2000 and 2002 were diagnosed in persons between the ages of 30 and 39, similar to previous reports. The mean age for people who were diagnosed with AIDS in Kansas during this time was 37 and for HIV it was 34.

Continuing to be the most prevalent mode of exposure for the contraction of HIV and AIDS, the report of male-to-male sex accounted for 46% and 48% of the risk for cases respectively. When considering the mode of exposure for men alone, the percent of HIV and AIDS cases reporting male-to-male sex accounted for 58% and 59% respectively. These percentages indicate the spread of HIV/AIDS in Kansas to be predominantly through unprotected sex, of course the small number of cases continues to be a factor in statistical interpretation. As the percentage of women contracting the disease increases, the number of cases reporting the mode of exposure as unprotected risky heterosexual sex also increases. This is the leading mode of exposure in Kansas Women, appearing in 39% of HIV cases and 60% of AIDS cases.

Risk behaviors for bacterial STDs are often the same behaviors that put people at risk for HIV. Two-thirds of the HIV infections in Kansas are apparently acquired sexually. Therefore, STD statistics and trends can indicate populations that are potentially at higher risk for HIV, especially if HIV prevalence rises in those populations. Prevention efforts targeting sexually acquired disease should lead to a reduction of HIV and AIDS as well as bacterial STDs. In Kansas, the combined number of confirmed gonorrhea and chlamydia cases totals nearly 10 times the number of HIV/AIDS cases in 2002; another indication of the low prevalence of HIV in the Kansas population. As with HIV and AIDS, Blacks and Hispanics are disproportionately at increased risk for bacterial STDs when compared with Whites.

Regional trends and highlights

As in past reports, Region 8 has the largest number of reported AIDS (85) and HIV cases (124) for the three-year period. This is not surprising, as it wholly contains Wichita, the city with the largest population in the state. However, comparing rates regionally, Region 1 (Wyandotte and Leavenworth counties) has the highest rate for AIDS (9.3/100,000 population per year) and HIV (9/100,000 population per year). All regions are showing a decrease in the 2000-2002 rates from the

1997-1999 rates, but again, this is likely due to a reporting lag time rather than an actual improvement in the status of the epidemic.

Regional differences in the number of living cases for those diagnosed between 2000 and 2002 are less dramatic. This is counter to the trends noted first in 2000 and again in the 2001 Epi Profile. Region 5 seemed to show a pattern of later AIDS diagnosis; none of the AIDS cases diagnosed between 1998 and 2001 were living as of the end of 2001. The current statistics for Region 5 indicate that 85% of AIDS cases diagnosed between 2000-2002 are still living, however, with the small number of cases involved this percentage is susceptible to major changes due to only minor variance. Statewide percentages of living AIDS cases are similar to those of Region 5.

As previously mentioned, the 2002 Kansas prevalence figures including all regions show only 16% of prevalent HIV/AIDS cases are female. However, 2002 Region 6 prevalence data show 40% of HIV/AIDS cases are female. Notably, this difference does not appear to be due to a reduction in male cases, but rather an increase in the number of females testing positive for HIV/AIDS and the small total number of cases.

Introduction

The purpose of this epidemiologic profile of HIV/AIDS is to describe the distribution of AIDS cases and HIV cases in the state and to help the HIV Prevention Community Planning Group (CPG) understand and interpret HIV-related epidemiologic data. This profile addresses four questions that are key to effective community planning:

1. What are the socio-demographic characteristics of the state population and the HIV/AIDS population?
2. What is the geographic distribution of HIV/AIDS infection?
3. Who is at risk for becoming infected?
4. What is the impact of HIV/AIDS on the population?

The epidemiologic profile is arranged around these key questions. The profile begins with a demographic description of the Kansas population.

The first section covers the state as a whole and describes AIDS and HIV cases first reported in Kansas. The second section describes prevalent cases of both HIV and AIDS in the nine case management regions. The third major section is a brief description of bacterial STDs in Kansas, especially as they relate to HIV and AIDS cases in the state. Most of the HIV and AIDS data were generated from the HARS database, a database surveillance system provided by the HIV/AIDS Surveillance Branch of the Centers for Disease Control and Prevention (CDC) and maintained by KDHE. The database was imported and analyzed using SAS 8.02. The STD data is from the KDHE database for statewide STD surveillance (STD*MIS) also provided by the CDC.

Epidemiology is the study of the distribution and determinates of disease frequency in human population. Information is grouped so that it is meaningful to describe disease transmission, frequency and trends. The goal of an epidemiologist and others in public health is to control or eliminate the disease in a population. Cases of AIDS have been monitored by KDHE since 1983. On July 1, 1999, HIV reporting by physicians and laboratory directors became mandatory. This allows KDHE to systematically monitor HIV infections that have not yet progressed to AIDS using a confidential name-based system.

The epidemiologic information contained in this report is just one of the tools the CPG utilizes in the community planning process. The information contained in this report comes to KDHE primarily from HIV cases, AIDS cases, and other STDs that are reportable by law to KDHE from health care providers, hospitals, and laboratories. Most of the information is collected and maintained by the HIV/AIDS Surveillance section.

Population data used is derived from the 2002 estimates supplied by the United States Census Bureau. The census is conducted every ten years, with yearly updated estimates.

Two major methods are used in this profile to describe the burden of disease on Kansas residents one is a **case count** and the other is a disease **rate**. The epidemic may be described by counting the number of cases over a certain period of time. For instance, the number of AIDS cases, or case count of AIDS diagnosed among adult Kansans from 2000-2002 was 267.

It is also important to know how far the disease has spread in a population (what proportion of the population is affected in a specific time). This proportion is known as a rate. As an example, to calculate the AIDS rate for Blacks in Kansas between 2000 and 2002, we count the number of AIDS cases reported among Blacks (71 reported between 2000 and 2002) and divide that count by the number of Blacks in Kansas population in that time period for an annual estimated rate among Blacks from 2000-2002 of 15.9/100,000 per year. Used in this way, a rate tells us the proportion of people in a given population group who have AIDS. Both a case count and rate are valuable in describing the burden of HIV and AIDS in Kansas. For the purposes of this report the population statistics from Census 2000 will be used for rate calculations. Additionally, all percentages from case counts and rates should be interpreted with the context of Kansas in mind; the extremely low prevalence of HIV and AIDS in Kansas may cause minor changes to seem disproportionately large.

Incidence is the number of new cases in a population within a certain time period and can be used to measure disease frequency. It is difficult to determine the true incidence of a disease that is monitored using passive surveillance. The analysis in this report is based on the date of report and again this will cause a delay in incidence estimates, therefore showing a lower incidence than that of reality. However, with this caution in mind, the incidence of AIDS cases reported in Kansas in 2002 was 55. **Prevalence** is the total number of cases of disease at any one point in time; a “snapshot” of the number of cases in an area. It does not give an indication of how long a person has had a disease. It cannot be used to calculate rates of disease, but can provide an estimate of risk that an individual will have a disease at a point in time. For this document, prevalence includes those persons reported to KDHE that are presumed to be still living in Kansas. By the end of 2002, there were 1008 prevalent cases of AIDS in Kansas. Kansas is considered a low prevalence state for both HIV and AIDS.

Several conventions were followed in presenting data for this document. Most of the statewide information presented is based on reported year rather than diagnosis year. There is often lag time between case diagnosis and case reporting. HIV and AIDS cases should be reported to KDHE at the time of diagnosis, but case reports received in one year may be of individuals diagnosed in previous years. For instance, there have been 390 HIV cases reported to KDHE by name since named reporting was established in July of 1999, but cases were diagnosed as early as 1983. Despite the requirements of Kansas regulations, not all cases of HIV and AIDS diagnosed will be reported immediately. This makes the number of reported diagnosed cases for the most recent year lower than the actual number diagnosed. Depending on year, between 70% and 97% of AIDS cases have been reported within two years of diagnosis. Using the year of report avoids the problems of reporting delays, but it is influenced by changes in surveillance case definitions, changes in surveillance resources, or other external factors.

If you have any questions, please contact Dr. Gail Hansen in the Bureau of Epidemiology and Disease Prevention at (785) 296-1127 or ghansen@kdhe.state.ks.us or Kevin Sykes in the same bureau at (785) 296-5587 or ksykes1@kdhe.state.ks.us.

Current HIV/AIDS surveillance statistics are maintained at:

<http://www.kdhe.state.ks.us/hiv-std/surveillance.html>.

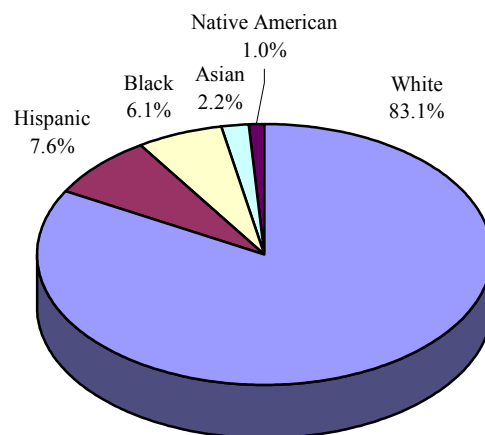
WHAT ARE THE SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE KANSAS POPULATION?

The state of Kansas is located in the geographic center of the forty-eight contiguous states. Its boundaries form a rectangle around 105 counties, with about 200 miles between the north and the south borders and 400 miles between the east and west borders. The 2002 population estimate is 2.7 million people, or about one percent of the United States population. The population density varies widely, with about two-thirds of the population located in the eastern one-third of the state. Census estimates indicate 50% of the state's population lives in metropolitan areas, compared with 80% of the U.S. population.

Kansas has three major metropolitan areas: Kansas City, Topeka, and Wichita. The four counties of Shawnee (Topeka), Sedgwick (Wichita), Wyandotte and Johnson (Kansas City) contain about 47% of the state's population. Counties on the west side of the state tend to be less populated, some having a population of less than 2,000. Thirty-one counties are classified as "frontier counties" (population density average <6 persons per square mile). One of the challenges in Kansas is to develop health education and promotion programs reaching a large but less densely populated state, while meeting the needs of a varied population with specific pockets of need.

Approximately 83% of the population in the state is White, 8% Hispanic (all races), 6% Black, 2% Asian, and 1% Native American. Individuals of Hispanic origin account for the fastest growing segment of the population. This population has been increasing in size for the last several years. The gender distribution is 52% female and 48% male. Approximately 13% of Kansans are over 65 years of age. The average per capita income is \$30,830 with an unemployment rate of 5.1%. Compared to the U.S. population, a lower percentage of Kansans fall below the poverty level (9.9% versus 12.4%), and a lower percentage of children are below poverty level (11.5% versus 16.1%).

Figure 1. Kansas Population, 2002



Part I

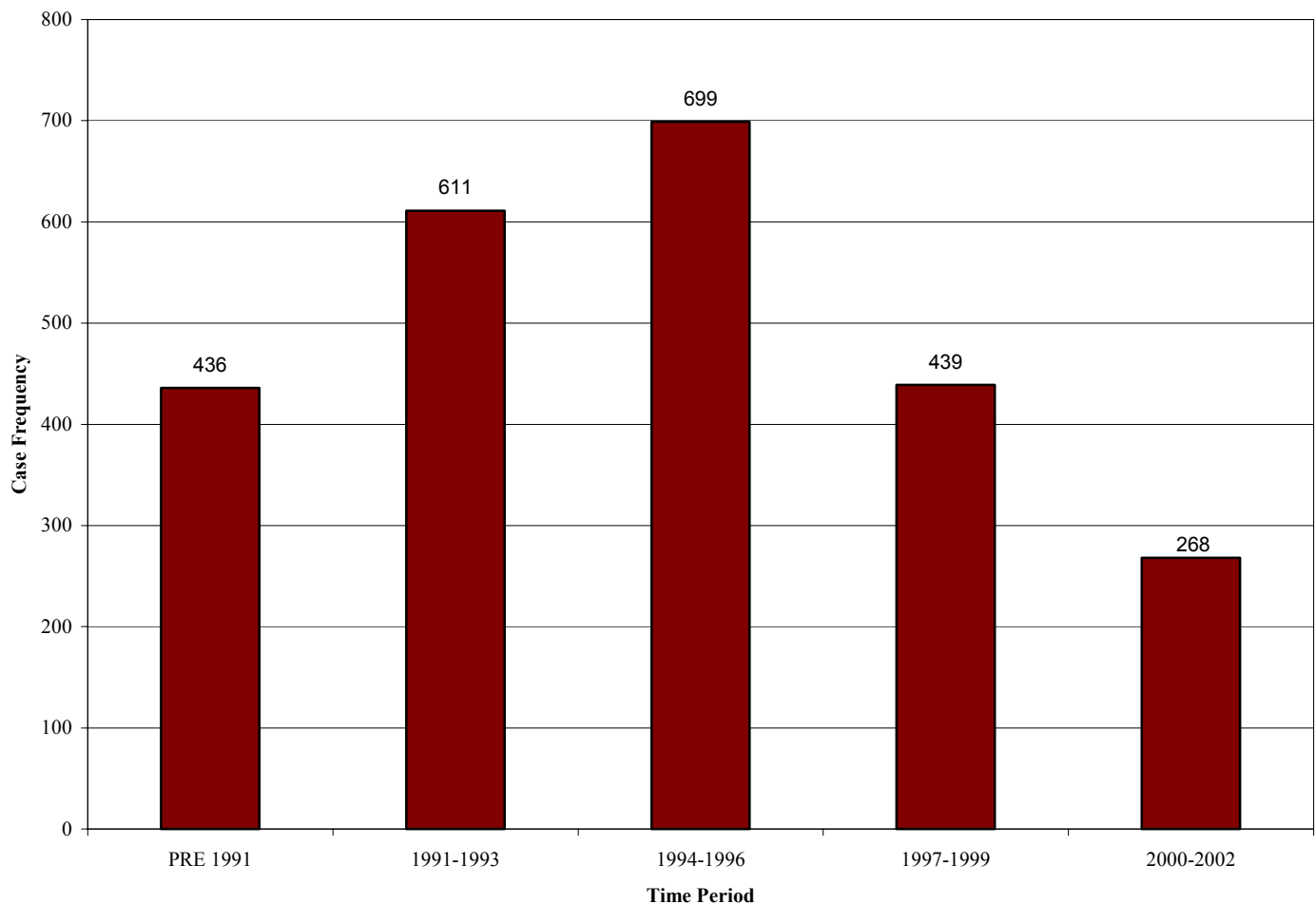
HIV/AIDS Cases First Diagnosed in Kansas

Total number of Kansas AIDS cases:	2,453
Total number of Kansas AIDS deaths:	1,445
Prevalent Kansas AIDS cases:	1,008

Trends in AIDS cases

For the purpose of this profile AIDS cases are examined based on the year of report and trends are discussed based on this year of report in three-year increments. The number of AIDS cases has declined by 39% between 1997-1999 (439 cases) and 2000-2002 (268 cases) as shown in Figure 2. The decline in AIDS cases may be attributed in part to the development and use of antiretroviral medications and protease inhibitors to treat HIV infection and/or prevention efforts.

Figure 1. Kansas AIDS Cases by Time Period



THE IMPACT OF AIDS

Differences by Race/Ethnicity

Race and ethnicity information collected for AIDS reporting is slightly different than that collected for many other statistical purposes. The information in this document relies predominantly on HIV/AIDS surveillance data collected from case reports submitted to the surveillance section. For this reason, racial and ethnic groups will be discussed as they are defined by CDC criteria. Whites are those who indicate they are white, but are not of Hispanic origin; Blacks are those who indicate they are African-American or African, but are not of Hispanic origin. Native Americans are those who identify as Native American, American Indian or Native Alaskan. Asians are those who identify as Asian or Asian American. Hispanics are those who indicate they are of Hispanic or Latin ethnicity, irrespective of the race they indicate. The 2004 Epi profile will make minor changes in these definitions specifically with relation to Hispanics and non-Hispanics, as defined by new race/ethnicity designations made by CDC.

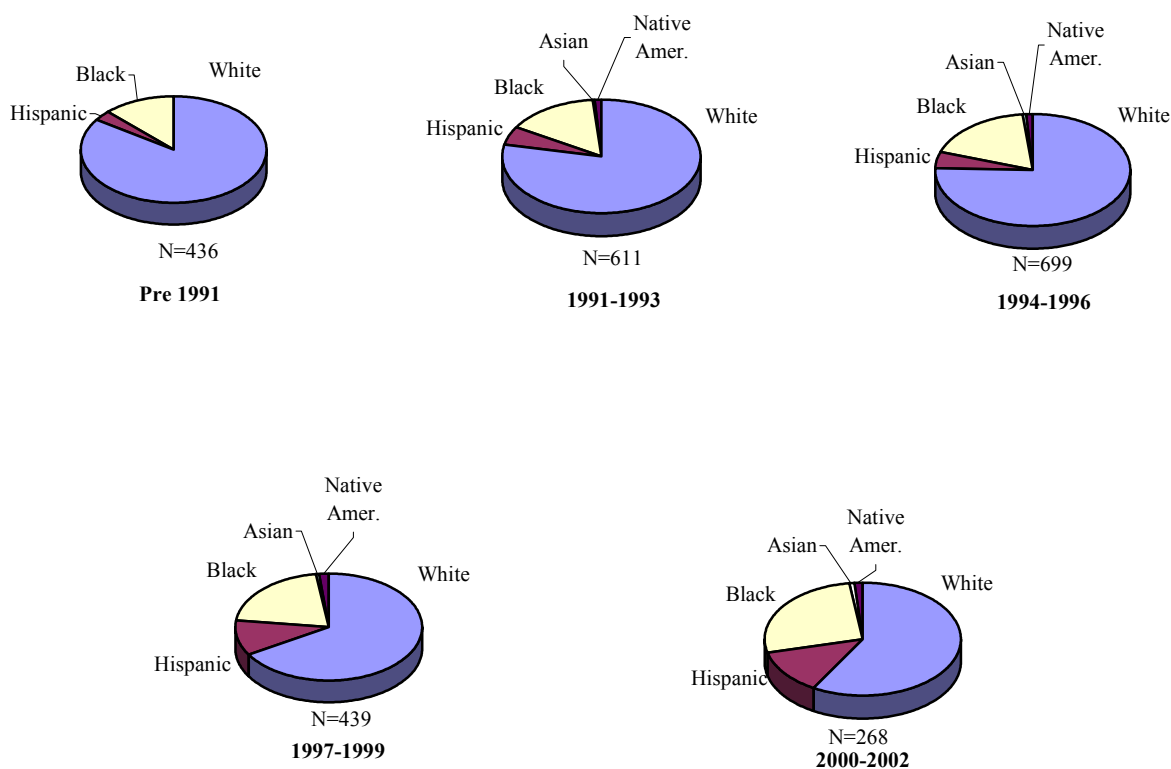
The distribution of Kansas cumulative AIDS cases by race/ethnicity reveals that Whites represent 74.3% of the state's reported AIDS cases. However, the impact of AIDS on the Kansas population cannot be fully understood or measured until the distribution of race/ethnicity in the Kansas population is known. As expected, Non-Hispanic Whites account for 83.1% of the population in Kansas. Although non-Hispanic Blacks account for only 6.1% of the population they represent 17.7% of the reported AIDS cases in Kansas. This reveals a disproportionate distribution of the cases among the Black Kansas residents when compared to their distribution within the Kansas population.

The number of reported AIDS cases over the past nine years has declined among Whites and Blacks, but has remained relatively constant among Hispanics, Native Americans, and Asians as shown in Table 1. This is evident by the 71% decline in AIDS cases among Whites between the period 1994-1996 (529 cases) and 2000-2002 (155 cases) and the 44% decline among Blacks between the period 1994-1996 (126 cases) and 2000-2002 (71 cases). This represents a faster decline among Whites than among Blacks. The small numbers of reported cases among the other racial and ethnic groups makes trend analysis less meaningful as small numbers are not statistically stable.

As stated earlier, the comparison between the distribution of reported AIDS cases among racial/ethnic groups must take into consideration the distribution of these racial/ethnic groups in the general population of Kansas (Figure 1) in order to examine the impact of the epidemic within the state. In Kansas, Blacks are disproportionally affected when compared with their distribution in the Kansas population. The proportion of reported AIDS cases among Blacks has been 2-4 times greater than the distribution within the Kansas population, as shown in Figure 3 and Table 1. The proportion of AIDS cases among Hispanics increased two-fold based on the number of cases reported before 1991 and the number of cases reported between 1991-1993. The proportion has remained relatively stable among Native Americans and Asians in Kansas, but this may be a reflection of small numbers or misclassification.

Table 1. Kansas AIDS Cases by Race/Ethnicity and Time Periods	TIME PERIOD										Total	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
WHITE	368	84.4	478	78.2	529	75.7	292	66.5	155	57.8	1,822	74.3
BLACK	54	12.4	91	14.9	126	18.0	91	20.7	71	26.5	433	17.7
HISPANIC	14	3.2	33	5.4	33	4.7	46	10.5	34	12.7	160	6.5
ASIAN/PACIFIC ISLANDER	0	0	3	0.5	3	0.4	3	0.7	2	0.8	11	0.5
NATIVE AMERICAN	0	0	6	1	8	1.1	7	1.6	4	1.5	25	1
UNKNOWN	0	0	0	0	0	0	0	0	2	0.8	2	0.1
TOTAL	436	100	611	100	699	100	439	100	268	100	2,453	100

Figure 3. Kansas AIDS Cases by Race/Ethnicity and by Time Period



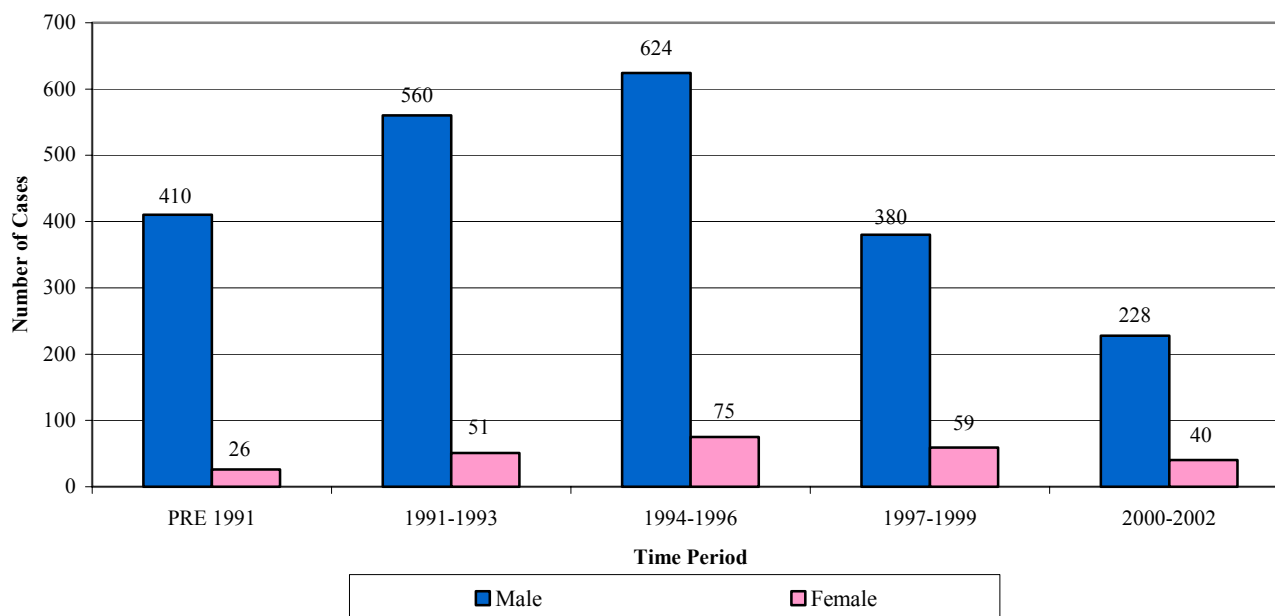
Rates across the Race/Ethnicity spectrum show universal reductions. These reductions are likely attributable to the previously mentioned reasons for reduction in the disease, i.e. Anti-retroviral therapy and prevention programs. Although the rate of cases for Blacks has decreased (Table 2), it still has a disproportionate effect on the population as compared to Whites.

Table 2. Kansas AIDS Rates/100,000/Year by Race/Ethnicity and Time Period	TIME PERIOD (Based on Date of Report)									
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
WHITE	368	2.1	478	7.1	529	7.8	292	4.3	155	2.3
BLACK	54	4.8	91	18.2	126	25.2	91	18.2	71	14.2
HISPANIC	14	1.9	33	5.3	33	5.3	46	7.4	34	5.5
ASIAN/PACIFIC ISLANDER	0	0	3	1.7	3	1.7	3	1.7	2	1.1
NATIVE AMERICAN	0	0	6	7.6	8	10.1	7	8.8	4	5.0
UNKNOWN	0	0	0	0	0	0	0	0	2	-
TOTAL	436	2.2	611	7.5	699	8.6	439	5.4	268	3.3

Differences by Gender

Since the beginning of the AIDS epidemic in Kansas, the number and rates of AIDS cases has been higher among men than women as shown in Figure 4. In the latest time period, men account for 85% of the 266 reported AIDS cases. The number of AIDS cases among males in Kansas has declined by 63% between the period 1994-1996 (624 cases) and 2000-2001 (228 cases).

Figure 4. Kansas AIDS Cases by Gender and Time Period (by date of report)



As shown in Table 3, an increased proportion of male AIDS cases have been reported among Blacks in each time period. However, the decreasing proportion of male White cases is largely responsible for this trend. The number of cases in Black males has actually been reduced in the most recent time period and more dramatically than the number of cases in White males. Additionally the changes in proportions can be partially attributed to the rising number of male Hispanic cases.

Differences in proportions among females by race/ethnicity have been less significant due to the small changes in the number of cases. Aside from a peak in cases from 1994-1996 among White females, there has been little change in the distribution of cases among races and ethnicities in women. For women, with the slow increase in the number of cases will come an increasing statistical significance of numbers by race/ethnicity. As the diversity of the population with AIDS in Kansas increases there will be changes in the proportions or percentages throughout the race/ethnicity spectrum. Therefore, comparisons of rates for these races and ethnicities are a more appropriate measure for identifying high-risk populations than case count.

Table 3. Kansas AIDS Cases by Race/Ethnicity and Gender	TIME PERIOD																			
	PRE 1991				1991-1993				1994-1996				1997-1999				2000-2002			
	GENDER				GENDER				GENDER				GENDER				GENDER			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHITE	351	85.6	17	65.4	448	80.0	30	58.8	476	76.3	53	70.7	259	68.2	33	55.9	133	58.3	22	55.0
BLACK	46	11.2	8	30.8	72	12.9	19	37.3	107	17.1	19	25.3	71	18.7	20	33.9	56	24.6	15	37.5
HISPANIC	13	3.2	1	3.8	31	5.5	2	3.9	31	5.0	2	2.7	41	10.8	5	8.5	33	14.5	1	2.5
ASIAN/PACIFIC ISLANDER	0	0	0	0	3	0.5	0	0	3	0.5	0	0	3	0.8	0	0	0	0	2	5.0
NATIVE AMERICAN	0	0	0	0	6	1.1	0	0	7	1.1	1	1.3	6	1.6	1	1.7	4	1.8	0	0
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.9	0	0
TOTAL	410	100	26	100	560	100	51	100	624	100	75	100	380	100	59	100	228	100	40	100

Differences by Mode of Exposure

Mode of exposure examines the behaviors that put people at risk for becoming infected with HIV. A hierarchy of risk factors exists in the HARS database so that only one risk factor per case is reportable. The hierarchy is based on risk behavior conventions used in surveillance with the greatest risk that would probably result in infection. For example, a man who reports sex with women and sex with men will be reported as MSM as the only risk factor.

As a reminder, in this profile, Heterosexual sex refers to all high-risk sex between a male and a female including sex with a bisexual male, an IDU or person known to be HIV positive. That is a CDC convention that is followed in this profile. Heterosexual sex as a mode of exposure refers only to high-risk heterosexual behavior; all other heterosexual sex is classified as NIR.

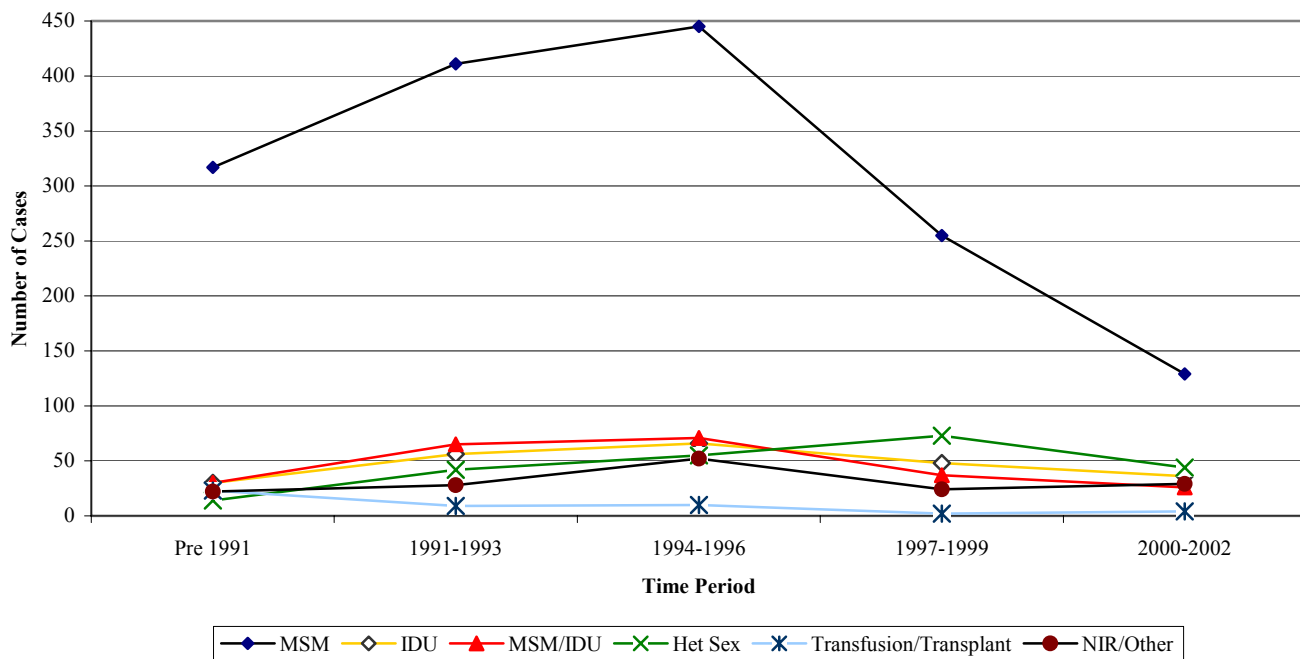
The number of cases and percentage of cases for the major risk factors are reported in Table 4 by time period. Cumulatively, the majority of Kansas' AIDS cases (64%) have been reported among MSM (Table 4). However, through the last two time periods the number and rate of AIDS cases who reported MSM as a risk factor has declined (Figure 5).

Table 4. Kansas AIDS Cases by Risk Factor and Time Period	TIME PERIOD										TOTAL	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
MSM	317	72.7	411	67.3	445	63.7	255	58.1	129	48.1	1,557	63.5
IDU	30	6.9	56	9.2	66	9.4	48	10.9	36	13.4	236	9.6
MSM/IDU	30	6.9	65	10.6	71	10.2	37	8.4	26	9.7	229	9.3
HET SEX*	14	3.2	42	6.9	55	7.9	73	16.6	44	16.4	228	9.3
TRANSFUSION/TRANSPLANT	23	5.3	9	1.5	10	1.4	2	0.5	4	1.5	48	2
NIR/OTHER**	22	5.1	28	4.6	52	7.4	24	5.5	29	10.8	155	6.3
TOTAL	436	100	611	100	699	100	439	100	268	100	2,453	100

*Het Sex is risk behavior as defined in glossary.

**NIR/Other: May and does include "No Identified Risk," as well as pediatric cases and hemophiliacs.

Figure 5. Risk Factor for Kansas AIDS Cases



As Figure 5 and Table 5 indicate, only the risks identified as NIR/other and transfusion/transplant showed increases in the number of cases for 2000-2002 though there are a small number of transfusion/transplant cases. However, percentages indicate a slight increase in the magnitude of the contribution from IDUs to the 2000-2002 cases. The proportion of risky heterosexual sex has increased steadily until a recent decline in the number of cases reporting this risk factor caused a 1%

decrease from 2000-2002. However, it remains the second most commonly reported mode of exposure for AIDS cases. All other risk factors have remained relatively stable from those reported before 1991 through those reported in 2002. Minor increases in the percentage of cases not reporting MSM are due to the reduction of MSM cases and not major increases in the number of cases reporting other risks.

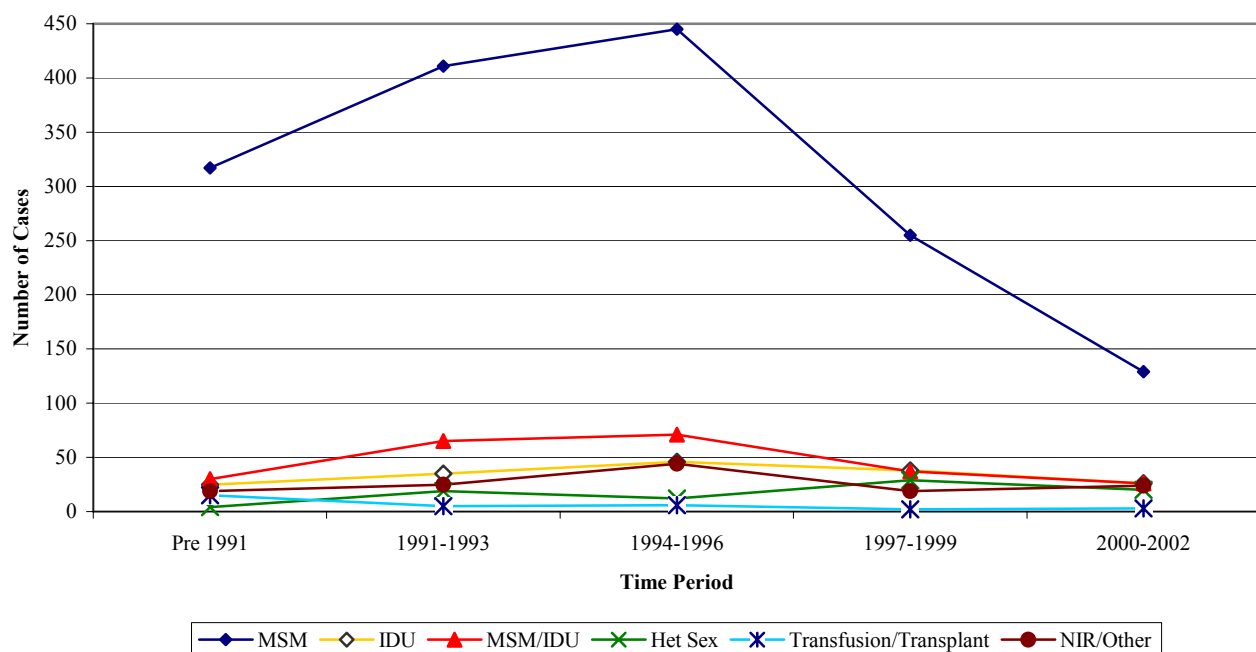
Of the 2,202 cumulative cases reported among men, the most prevalent mode of exposure reported is male-to-male sex (71%). However, the number of cases reporting risky heterosexual sex for mode of exposure among men has proportionally increased over time as shown in Figure 6 and Table 5. Among all MSM, for the period 2000-2002, White men accounted for 67% of the cases and Black men accounted for 22% of the cases. This follows the trend of the steady increase of Black men reporting a risk of MSM that began before 1991.

Table 5. Mode of Exposure Among Kansas Male AIDS Cases	TIME PERIOD										TOTAL	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
MSM	317	77.3	411	73.4	445	71.3	255	67.1	129	56.6	1,557	70.7
IDU	25	6.1	35	6.3	46	7.4	38	10.0	26	11.4	170	7.7
MSM/IDU	30	7.3	65	11.6	71	11.4	37	9.7	26	11.4	229	10.4
HET SEX	4	1	19	3.4	12	1.9	29	7.6	20	8.8	84	3.8
TRANSFUSION/TRANSPLANT	15	3.7	5	0.9	6	1	2	0.5	3	1.3	31	1.4
NIR/OTHER	19	4.6	25	4.5	44	7.1	19	5.0	24	10.5	131	6
TOTAL	410	100	560	100	624	100	380	100	228	100	2,202	100

*Het Sex is risk behavior as defined in glossary.

**NIR/Other: May and does include "No Identified Risk," as well as pediatric cases and hemophiliacs.

Figure 6. Mode of Exposure Among Kansas Male AIDS Cases



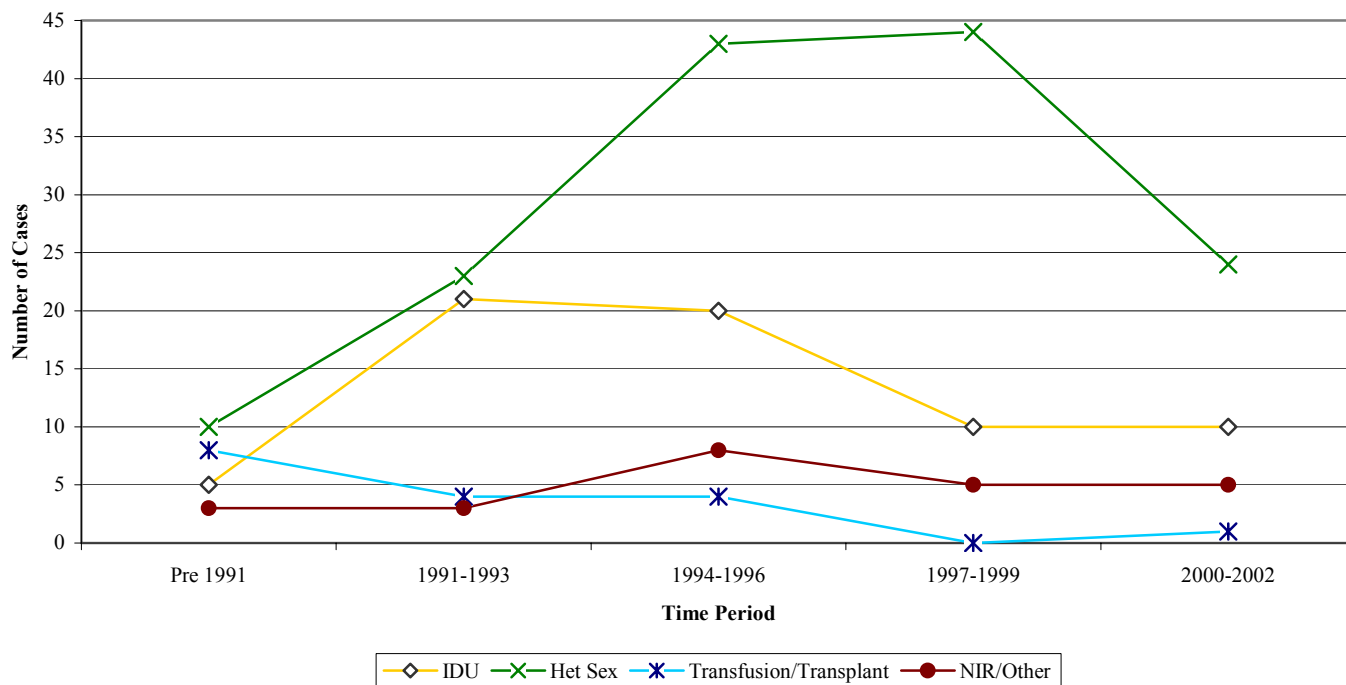
Overall, few trends are evident among women, mostly due to small numbers as shown in Figure 7 and Table 6. The number and proportion of female AIDS cases with transfusion/transplant as the reported risk factor has significantly decreased. Among women of color, Blacks (11 cases) and Hispanics (1 case) accounted for 50% of the 24 women who reported a risk factor of risky heterosexual sex for the period 2000-2002 and 40% of the total female cases reported in that time period. High-risk heterosexual sex is the leading risk factor among Kansas's female AIDS cases.

Table 6. Mode of Exposure Among Kansas Female AIDS Cases	TIME PERIOD										TOTAL	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
IDU	5	19.2	21	41.2	20	26.7	10	17	10	25	66	26.3
HET SEX	10	38.5	23	45.1	43	57.3	44	74.6	24	60	144	57.4
TRANSFUSION/TRANSPLANT	8	30.8	4	7.8	4	5.3	.	.	1	2.5	17	6.8
NIR/OTHER	3	11.5	3	5.9	8	10.7	5	8.5	5	12.5	24	9.6
TOTAL	26	100	51	100	75	100	59	100	40	100	251	100

*Het Sex is risk behavior as defined in glossary.

**NIR/Other: May and does include "No Identified Risk," as well as pediatric cases and hemophiliacs.

Figure 7. Mode of Exposure for Kansas Female AIDS Cases



Differences by Age

Table 7 and Figure 8 show the number of AIDS cases reported in Kansas by age group (at diagnosis) by time period. The largest number of cumulative AIDS cases is among individuals 30-39 years of age at the time of diagnosis (1108 cases) with a median age of 35 years. The proportion of AIDS cases among individuals between the ages of 40-49 has represented a larger portion of AIDS cases than the 20-29 year age range beginning with the time period 1994-1996. There have been a total of 12 AIDS cases reported in children 12 years old or younger in Kansas. Due to the small number of pediatric cases (12 or younger) in Kansas there is no further descriptive epidemiology of these cases.

Table 7. Kansas AIDS Cases by Age Group	TIME PERIOD										TOTAL	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
AGEGROUP												
12 YEARS OLD OR YOUNGER	3	0.7	3	0.5	4	0.6	1	0.2	1	0.4	12	0.5
13-19 YEARS OLD	3	0.7	6	1.0	5	0.7	1	0.2	2	0.8	17	0.7
20-29 YEARS OLD	118	27.1	145	23.7	142	20.3	73	16.6	51	19	529	21.6
30-39 YEARS OLD	177	40.6	282	46.2	331	47.4	212	48.3	106	39.6	1,108	45.2
40-49 YEARS OLD	83	19	123	20.1	162	23.2	114	26	83	31	565	23
50 YEARS OLD OR OLDER	52	11.9	52	8.5	55	7.9	38	8.7	25	9.3	222	9.1
TOTAL	436	100	611	100	699	100	439	100	268	100	2,453	100

Figure 8. Kansas AIDS Cases by Age Group and Time Period

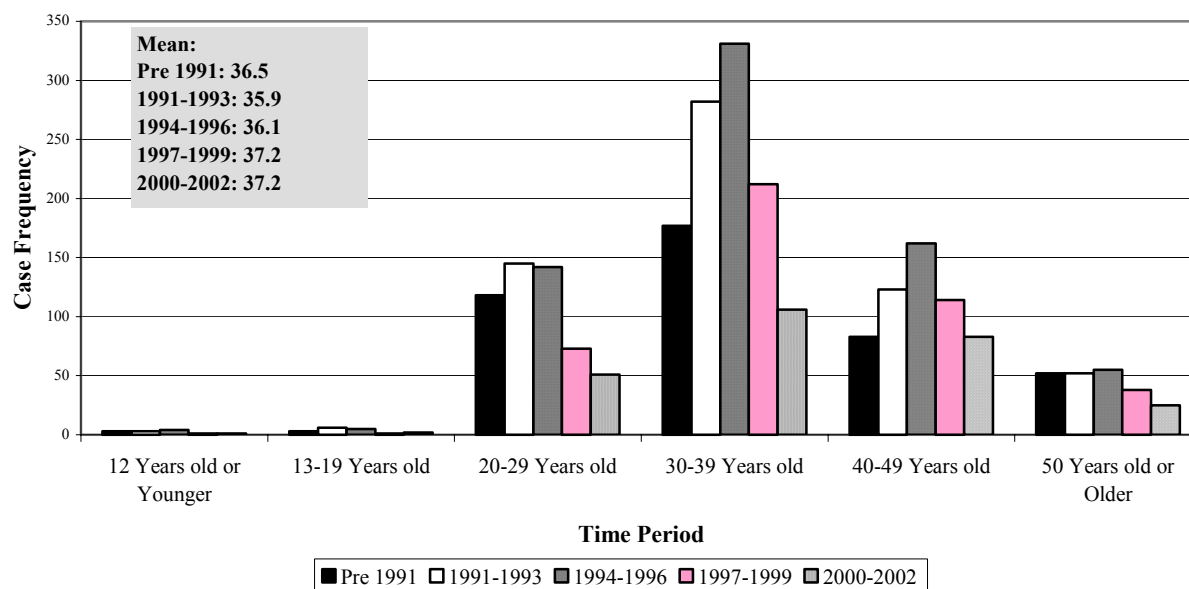


Figure 9 is a box plot that should be interpreted as a pictorial representation of the distribution of the ages of Kansas's cases of AIDS by time period. The top of the box corresponds to the upper 25%, whereas the bottom of the box represents the lower 25%. Therefore, it can be said that 50% of the cases range in age between those two lines. The horizontal line in the box is drawn at the median age value and the X inside the box represents the mean. The lines extending out of the box represent the complete range of ages for the time period. Interpretation of these box plots indicates that until the most recent time period (2000-2002) the distribution of the cases by age was very broad. As the mean and median move closer together the distribution of the ages narrows. Therefore, it can be said that according to this data the range of ages effected by AIDS in Kansas is gradually decreasing to a smaller group. Additionally, the narrowing age range could be attributed to the decreasing number of cases.

Figure 9. Age Distribution of AIDS Cases by Time Period



Differences by Region

Kansas is divided into nine case management regions (Kansas regional map located on page 24). Region 8 has reported 34% of the cumulative AIDS cases reported in Kansas as shown in Table 8. Region 8 includes Wichita, which is the state's largest city. Region 8 also has the largest population of the regions, so it is not unexpected that the largest number of cases reported is from this region. The proportion of cases in Regions 3,4,5,6, and 9 have all decreased in the time period 2000-2002.

Table 8. Kansas AIDS Cases by Region and Time Period	TIME PERIOD										TOTAL	
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002			
	N	%	N	%	N	%	N	%	N	%	N	%
REGION 1	98	22.5	111	18.2	130	18.6	86	19.6	63	23.6	488	19.9
REGION 2	107	24.5	123	20.1	100	14.3	53	12.1	38	14.2	421	17.2
REGION 3	14	3.2	28	4.6	34	4.9	17	3.9	7	2.6	100	4.1
REGION 4	51	11.7	51	8.4	66	9.4	51	11.6	28	10.5	247	10.1
REGION 5	14	3.2	29	4.8	47	6.7	15	3.4	8	3	113	4.6
REGION 6	15	3.4	23	3.8	19	2.7	14	3.2	14	5.2	85	3.5
REGION 7	13	3	24	3.9	27	3.9	14	3.2	16	6	94	3.8
REGION 8	117	26.8	207	33.9	254	36.3	171	39	85	31.8	834	34
REGION 9	7	1.6	15	2.5	22	3.2	18	4.1	8	3	70	2.9
TOTAL	436	100	611	100	699	100	439	100	267	100	2,452	100

Region 1, which includes part of Kansas City continues to have the highest rate of AIDS cases reported in Kansas as is shown by Table 9.

Table 9. Kansas AIDS Cases and Rate/100,000/Year by Region and Time Period	TIME PERIOD									
	PRE 1991		1991-1993		1994-1996		1997-1999		2000-2002	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
REGION 1	98	5.4	111	16.3	130	19.1	86	12.7	63	9.3
REGION 2	107	3.5	123	8.6	100	7.0	53	3.7	38	2.6
REGION 3	14	1.5	28	6.5	34	7.9	17	4.0	7	1.6
REGION 4	51	2.2	51	5.6	66	7.2	51	5.6	28	3.1
REGION 5	14	0.9	29	4.9	47	7.9	15	2.5	8	1.3
REGION 6	15	1.3	23	5.6	19	4.6	14	3.4	14	3.4
REGION 7	13	0.5	24	2.7	27	3.0	14	1.6	16	1.8
REGION 8	117	2.2	207	9.5	254	11.7	171	7.9	85	3.9
REGION 9	7	0.6	15	2.8	22	4.2	18	3.4	8	1.5
STATE CASE TOTAL AND RATE	436	2.2	611	7.6	699	8.7	439	5.4	267	3.3

Kansas AIDS Summary and Highlights

The most recent three-year trend analysis grouping, 2000-2002 indicates a decline in the number of new cases of AIDS reported in Kansas. Some of that may be to reporting delays. However, a true reduction in the number of cases of AIDS has multiple implications. If we assume that the number of new HIV infections remains constant in Kansas it is safe to assume that reductions in the number of AIDS cases are due to improvements in treatments prolonging the interval from infection with HIV to the development of AIDS, i.e. Anti-retroviral therapies and protease inhibitors. However, because named-reporting did not begin until July of 1999, it is difficult to determine the true direction of this trend. If we assume that the number of new HIV infections is likewise decreasing, the reduction is likely due to an improvement in prevention techniques. Another explanation is a combination of a reduction in the number of new HIV infections, an improvement in the treatment of HIV patients and a continued effort by those individuals previously infected to consistently adhere to recommendations and treatments thereby reducing the number of cases converting from HIV to AIDS in this time period. As is often the case in epidemiology there are multiple explanations for the same trend and in reality a combination of those explanations is often the source of changes in trends.

Race/ethnicity trends in Kansas continue to indicate AIDS has a disproportionate effect on Kansas Blacks. Due to the small number of cases in Kansas proportions can be unstable, however, the rate of AIDS affected Blacks in Kansas is more than six times the rate in Whites and nearly triple the rate in Hispanics. Of additional epidemiologic concern is the growing population of HIV/AIDS affected Hispanics in Kansas. As the number of Hispanics living in Kansas grows the proportion of cases reporting a Hispanic origin is also expected to grow. Key efforts will be necessary to maintain culturally relevant and effective prevention techniques for these populations. The diversity of the Kansas population is increasing and it is imperative that all levels of HIV/AIDS care and prevention target yet remain sensitive to the populations statistically indicated to be at highest risk for infection.

The differences in cases by gender continue to indicate a disproportionate effect on men in Kansas. The number of female cases has remained fairly constant, however, a reduction in the number of male cases has caused an increase in the percentage of cases that are female. The disproportionate effect of AIDS on males in Kansas overshadows any changes in the trends in females.

One key in the development of prevention techniques is identifying the population most at need for interventions. In HIV/AIDS prevention statistical information points to particular populations that engage in risky behaviors (mode of exposure) known to put them at risk for infection. The most common mode of exposure reported for Kansas AIDS cases continues to be men who have sex with men (MSM). Again, due to the small number of cases in Kansas, cases reporting MSM overshadow the effects of other modes of exposure on Kansas' trends. Trends by mode of exposure rely on raw numbers and proportions, as determining the total number involved in many at risk populations is inexact at best. The reduction in AIDS cases reporting MSM in the most recent time period to 129 cases from 255 cases is slightly misleading. This is a continuation of the trend that began with the 1997-1999 reductions in the number of cases reporting MSM and a reduction in total cases reported from 380 to 228. The "early adopters," those people on the first peak of the "S" diffusion curve of adoption, are likely adopting prevention efforts aimed at this target population. The "S" diffusion curve was first described in 1903 by French sociologist Gabriel Tarde. The curve was further

explained and applied to the adoption of ideas in the book *Diffusion of Innovation* by Everett Rogers. The “early adopters” are described as the second group to adopt the changes encouraged by a new innovation and creates the first significant reduction in negative health behaviors. The first group to adopt change is defined as the “innovators” and is generally described as a group of people that are bold and confident in their ability to cope with a high degree of uncertainty. What all of this means is that, according to Rogers, most behavioral change innovations will follow an “S” adoption curve and the number of people adopting the change will rise and fall as an S, of which the first peak will be as a result of the “early adopters.” As the number of cases reporting MSM as a risk for infection decreases, the efforts required to cause a further decline will increase. This phenomenon is commonly seen in behavioral modification models. Additionally, this explains the smaller likelihood of reducing the number of cases reporting other modes of exposure. However, it does not reduce the need to continue to develop prevention techniques for MSM and other risk groups. For instance, among females, the leading reported mode of exposure remains risky heterosexual sex. Continued efforts to change unsafe behaviors among females can potentially prevent further infections and should of course be encouraged.

AIDS distribution by age group reveals the peak age of onset is on those people between the ages of 30 and 39. This has consistently been the case since the beginning of reporting in 1984. However, with the continued efforts aimed at prolonging the lives of individuals infected by HIV, future reports could show evidence of an aging AIDS population with different needs in that aging population both for prevention and care.

Regional distribution of cases continues to indicate a larger proportion of AIDS cases living in the larger urban and semi-urban areas. Region 8, which has the largest population and contains the largest city in the state, continues to have the largest number of newly reported cases and prevalent cases. When comparing regions by rates per 100,000 population Region 1 (Wyandotte and Leavenworth counties) continues, as it has since the inception of reporting, to have the highest rate. There is currently no indication that these trends will change in any way. Kansas will likely continue to report a larger number of cases in these urban areas and larger populations will continue to house a larger number of the AIDS cases.

THE IMPACT OF HIV

Kansas HIV Cases

Since Kansas initiated HIV reporting on July 1, 1999, 390 cases have been reported to KDHE. Of those, 279 were diagnosed after the implementation of HIV named reporting.

Since HIV cases were not reportable before July 1, 1999, the number of cases diagnosed and reported prior to July 1, 1999 does not accurately reflect the total number of HIV cases diagnosed in those years. Therefore, it is difficult to get an estimate of the cumulative number of HIV cases in Kansas. The data does not represent the total number of people diagnosed with HIV or the number of currently living with HIV, but without an AIDS diagnosis. It also does not include those who may be infected with HIV but have not yet been tested or reported.

Differences by Race/Ethnicity and Gender

As Table 10 illustrates 57.9% of all reported HIV cases were reported among Whites. Additionally, 22.6% of the reported HIV cases were reported among Blacks. These proportions are comparable to the proportions found in AIDS cases for the time period 2000-2002.

Table 10. Kansas HIV Cases by Race/Ethnicity and Gender 2000-2002	Gender				TOTAL	
	Male		Female			
	N	%	N	%	N	%
RACE/ETHNICITY						
WHITE	157	61.8	27	42.2	184	57.9
BLACK	50	19.7	22	34.4	72	22.6
HISPANIC	28	11.0	11	17.2	39	12.3
ASIAN/PACIFIC ISLANDER	1	0.4	1	1.6	2	0.6
NATIVE AMERICAN	2	0.8	0	0	2	0.6
UNKNOWN	16	6.3	3	4.7	19	6.0
TOTAL	254	100	64	100	318	100

Females account for 20.1% of the reported HIV cases, but only account for 14.9% of the reported AIDS cases for the time period 2000-2002 as shown in Figure 11. The accompanying female rates for HIV and AIDS per year per 100,000 population are 1.6 and 1.0, respectively. For males the rates, for HIV and AIDS per year per 100,000 population are 6.4 and 5.7, respectively.



Figure 10. Kansas HIV/AIDS Cases by Gender

Referring back to Table 10 Black females and White females are reported at nearly the same proportion, despite the drastic difference in their proportions among the Kansas population. Black females represented 6% of the female population in 2002 yet account for over one third of the reported cases among women; therefore their rate is significantly higher than all other races/ethnicities. Black males also represented only 6% of the male population in 2002; however, the proportion of HIV positive Black males is nearly one in five, not as high as that of the Black females. Overall, the combined Black male and female HIV cases rate is 15.9 per 100,000 population, which is significantly higher than any other racial or ethnic group in Kansas.

Table 11. Kansas HIV Cases and Rates/100,000/Year by Race/Ethnicity 2000-2002		
	N	Rate
RACE/ETHNICITY		
WHITE	184	2.7
BLACK	72	15.9
HISPANIC	39	6.9
ASIAN/PACIFIC ISLANDER	2	1.4
NATIVE AMERICAN	2	3.0
UNKNOWN	19	-
TOTAL	318	3.9

Differences by Mode of Exposure

The mode of exposure for those infected with HIV is similar to those diagnosed with AIDS in the last three years as shown in Figure 11 and Table 12. The majority of cases (45.6%) reported male-to-male sex as a mode of exposure for contracting HIV; this becomes more important since by definition no woman can have this risk. When considering only males 57.1% of male cases in Kansas reported MSM as the mode of exposure. IDU was reported as a mode of exposure in 12.0% of all cases regardless of gender. This is slightly less than the 13.8% of the AIDS cases who reported IDU as the mode of exposure for the period 2000-2002. Additionally, 22.3% of cases were found to have no identified risk. This is of particular concern considering the comparison to the AIDS cases for the time period 2000-2002, where approximately 10% of cases are reported to with no identified risk. This is consistent with what is seen in other states; acknowledging and

determining risk factors is a bigger challenge when people are first diagnosed. Understanding the distribution of the modes of exposure is key to the prevention of future infections.

**Figure 11. Kansas HIV Cases by Mode of Exposure
2000-2002**

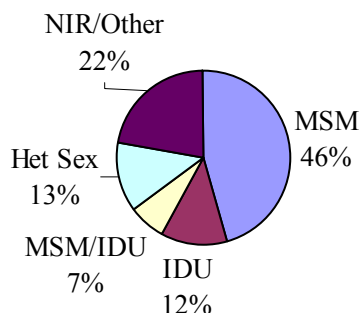


Table 12. Kansas HIV Cases by Mode of Exposure and Gender 2000-2002	GENDER				TOTAL	
	Male		Female			
	N	%	N	%	N	%
RISK BEHAVIOR						
MSM	145	57.1	0	0	145	45.6
IDU	25	9.8	13	20.3	38	12.0
MSM/IDU	22	8.7	0	0	22	6.9
HET SEX	17	6.7	25	39.1	42	13.2
NIR/OTHER	45	17.7	26	40.6	71	22.3
TOTAL	254	100	64	100	318	100

defined in glossary.

*Het Sex is risk behavior as

**NIR/Other: May and does include "No Identified Risk," as well as pediatric cases and hemophiliacs.

Differences by Age

The age group at diagnosis among Kansas HIV cases (Figure 12 and Table 13) is similar to the AIDS age group distribution. The largest number of cases fall in the 30-39 year old age group for both HIV and AIDS. The proportion of HIV cases among those 20-29 years is greater than those 40-49 years, but less than those 30-39 years. The median age at diagnosis for HIV cases diagnosed between 2000 and 2002 is 34 years of age, which is logically and significantly lower than the median age at diagnosis for AIDS (37) for AIDS cases diagnosed in the same time period ($p < .0001$). Therefore, it can be said statistically that the two ages are significantly different.

Figure 12. Kansas HIV Cases by Age Group 2000-2002

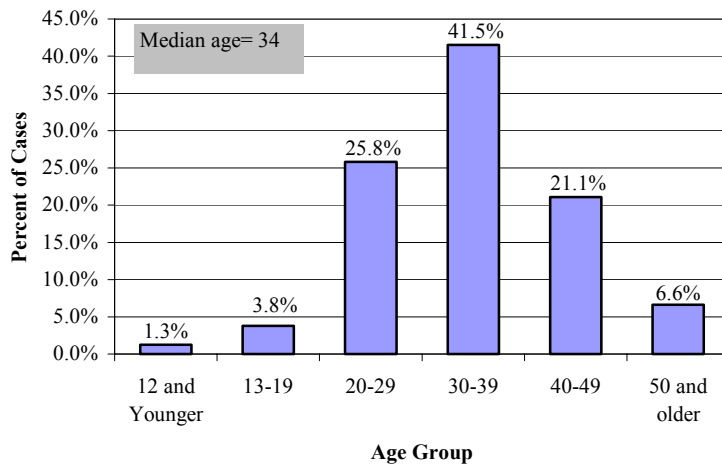


Table 13. Kansas HIV Cases by Age Group*		
Age Group	N	%
12 YEARS OR YOUNGER	4	1.3
13 TO 19 YEARS	12	3.8
20 TO 29 YEARS	82	25.8
30 TO 39 YEARS	132	41.5
40 TO 49 YEARS	67	21.1
50 YEARS OR OLDER	21	6.6

*See Figure 12

Differences by Region

The regional distribution of HIV cases follows the same basic regional distribution pattern as AIDS cases. Nearly 61% of the HIV cases were reported in the most populated regions (Region 2, Region 4, and Region 8) as shown in Table 14. Region 3 reported the fewest cases between 2000-2002.

Table 14. Kansas HIV Cases by Region 2000-2002	N	%
REGION 1	61	19.4
REGION 2	40	12.7
REGION 3	6	1.9
REGION 4	28	8.9
REGION 5	11	3.5
REGION 6	11	3.5
REGION 7	14	4.4
REGION 8	124	39.4
REGION 9	20	6.4

Kansas HIV Summary and Highlights

HIV name based reporting began July of 1999 and this report contains the first three full year trend analysis. Although the first three years will not likely serve as concrete predictors for future trends in Kansas, they do serve as a starting point. This starting point will allow some conclusions, but all conclusions should be understood to be based on small numbers that make statistically significant assumptions difficult. As time passes and data are collected over a larger span of time predictions, conclusions, and assumptions may change, but may become more statistically more valid.

Current differences by race/ethnicity in Kansas indicate a larger proportion of infections with HIV among Whites. However, there is a disproportionate effect on Blacks when comparing the proportion of cases to the proportion of Blacks in the Kansas population. For the time period 2000-2002 this disproportionate effect is more noticeable among women than men, but the smaller number of cases among women makes this proportion unstable. The third highest proportion is found in cases reporting an ethnicity of Hispanic regardless of race and as the proportion of Hispanics in the Kansas population grows this could become a larger problem. Hispanics are currently the fastest growing population group in Kansas and 2002 population estimates indicate Hispanics to be the second largest population by race/ethnicity in Kansas and second when HIV cases are ranked by rate per 100,000 population. Culturally sensitive prevention messages for Hispanics should be a focus future prevention models. The highest rate of infection per 100,000 population in Kansas continues to be among Blacks for the time period 2000-2002.

The statistics for exposure among HIV cases are similar to those for AIDS cases. The leading mode remains MSM, however, the second leading route of exposure is no identified risk (NIR)/other. This also includes heterosexual sex with a partner whose history is unknown, as well as pediatric cases and hemophiliacs that may have received blood transfusions prior to current standard screening procedures. Future goals for the Kansas Surveillance program include the reduction and refinement of the number of cases that are reported as NIR, in order to aid in the development of prevention strategies.

The median age for HIV cases is 34, which indicates the age distribution to be slightly younger than AIDS. However, the age group with the largest number of HIV infected individuals is 30-39 years of age, which is the same for AIDS cases. The difference in medians is three years and is statistically significant as expected. The median for age at diagnosis of HIV regardless of HIV or AIDS status has remained relatively stable. For AIDS cases by year of report, the median age for HIV diagnosis has been within the range of 32 to 36 years of age since 1986. For HIV cases reported since July of 1999, the median age at diagnosis has been 34 years of age every year. While it would be improper to use this to predict ages of infection it is safe to assume that this reiterates the importance of focusing prevention on those 30-39 years of age.

Regional distribution for HIV follows the same distribution patterns of AIDS cases. The largest proportion of HIV cases continue to be reported in the larger urban and semi-urban areas. Region 8, which has the largest population and contains the largest city in the state, continues to have the largest number of newly reported cases and prevalent cases. There is currently no indication that these trends will change in any way, Kansas will likely continue to report a larger number of cases in these urban areas and larger populations will continue to house a larger number of the AIDS cases.

PART II

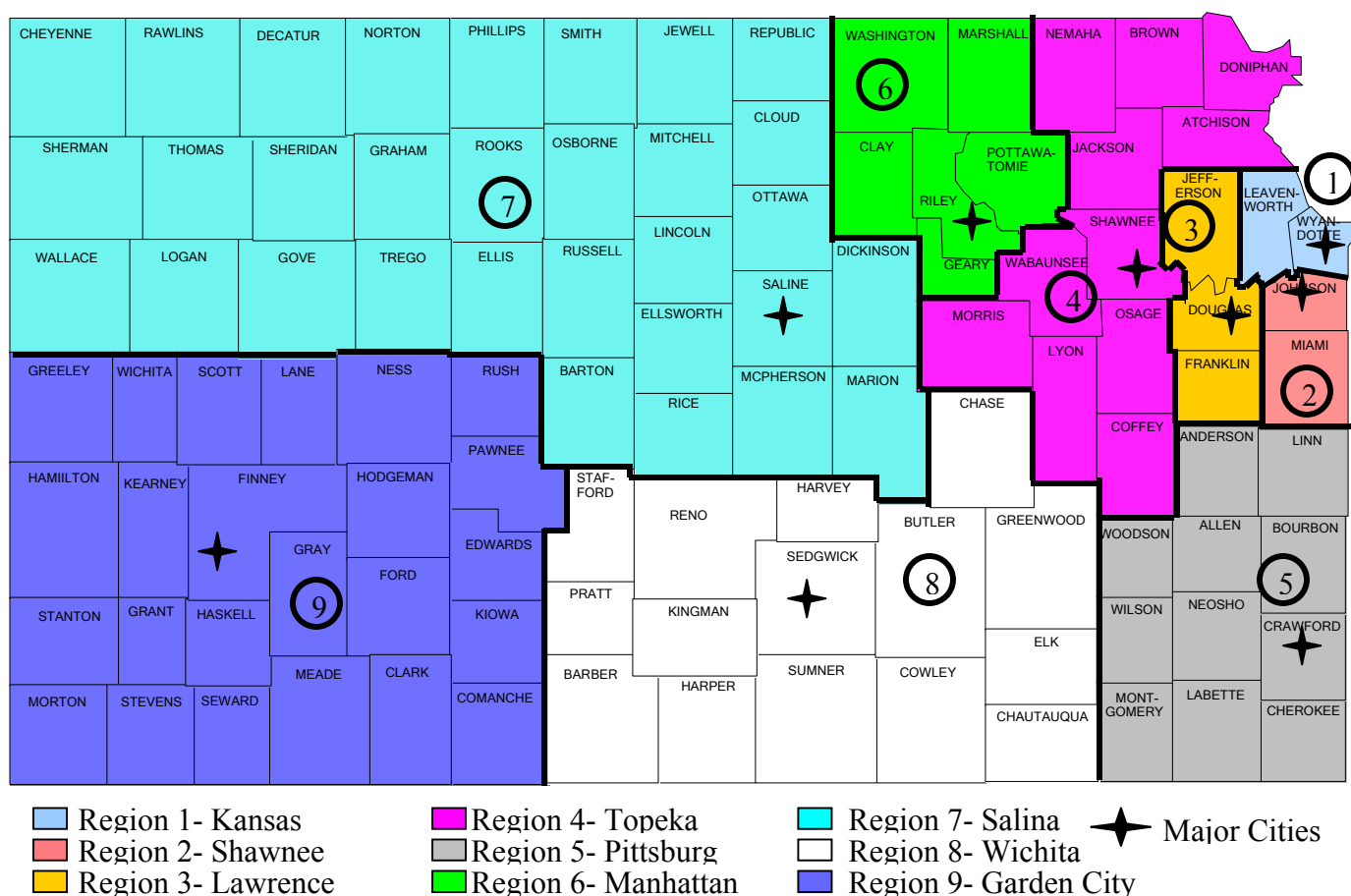
Impact of HIV/AIDS in Kansas

Each HIV case management-planning region is presented in some detail. Those regions with fewer identified cases and smaller numbers of prevalent cases will not be discussed as thoroughly as those regions with larger numbers. This is done mostly to assure the confidentiality of infected persons. Also, smaller numbers mean that rates and proportions are unstable. Changes from one year or group of years may reflect true changes, but are more likely the result of normal variations that present as large changes with small numbers.

Prevalent HIV and AIDS cases and region of current residence are presented and used for calculations in this section. With only a small amount of collected HIV data, it is impossible to draw meaningful conclusions based only on HIV cases at a regional level. Most of the information on prevalent cases is presented in the table, with less emphasis in the narrative.

Since Kansas implemented HIV reporting on July 1, 1999, the HIV positive data does not reflect the total burden of the epidemic within the Kansas community.

HIV Regions in Kansas



2002 Estimated population of Kansas:

2,715,884

Cases of HIV/AIDS presumed living in Kansas:

1,390

AIDS Cases 1998-2002

The top section will discuss cases diagnosed in the most recent five-year period. The five-year grouping was done in order to avoid the problems when working with small numbers of instability of statistics and a concern for confidentiality.

There were 554 AIDS cases diagnosed and reported in Kansas between 1998 and 2002, with an overall average yearly rate of 4.1/100,000. Of the 554 AIDS cases diagnosed from 1998-2002, 457 (82.5%) are presumed living. The average age at AIDS diagnosis is 37.2 years for the time period 1998-2002.

The number of AIDS cases was highest among Whites (335 cases), followed by Blacks (137 cases) and Hispanics (68 cases). However, the rate for Blacks (16.5/100,000) was five and half times that of Whites (3.0/100,000) and the Hispanic rate (6.6/100,000) was two times that of Whites. Men of color accounted for 38.3% of the AIDS cases among men reported between 1998 and 2002 although men of color represent 9.8% of the men in Kansas.

Blacks (10 cases) and Hispanics (13 cases) accounted for 46.9% of the AIDS cases reporting IDU as a risk factor among men, but only 29.4% of those reporting MSM as a risk factor.

Race/Ethnicity and Gender

The middle section will stratify the HIV/AIDS population by race/ethnicity in order to further describe the epidemic. The data following is based on prevalence, beginning with the first case from 1983. People of color account for 42.7% and 32.5% of the prevalent HIV and AIDS cases respectively. Men of color account for 31.6% of the prevalent HIV and 30.9% of the prevalent AIDS cases.

White males account for 67% of the prevalent HIV and AIDS cases among men. However, men of color represent 50%, 60%, and 51% of the cases reporting IDU, Het Sex, and NIR/Other as risk factors, respectively. The distribution of these risk factors is not significantly different for HIV versus AIDS diagnoses among men.

White females account for 52.1% of the prevalent HIV and AIDS cases among women. The distribution of risk factors by race for women is proportionately similar, except in NIR where women of color account for 62.5% of the cases reporting NIR/Other as a risk factor. Comparisons separating HIV and AIDS are unstable due to data size and are therefore not compared.

Prevalent HIV/AIDS Cases

This section will summarize prevalent cases by multiple strata. There have been 2,748 people reported with AIDS in Kansas since 1983. This includes those currently presumed to be living in Kansas regardless of where they were first diagnosed. Of those, 1,008 (36.7%) are presumed living in Kansas (see Table 15). Cases are presumed living if KDHE does not have a record of death. There have been 480 cases of HIV reported in Kansas since 1999. This includes 381 people presumed to be living in Kansas. The reported HIV cases may not reflect the total burden of HIV in Kansas, as it does not include many diagnosed with HIV prior to 1999, but who have not been diagnosed with AIDS.

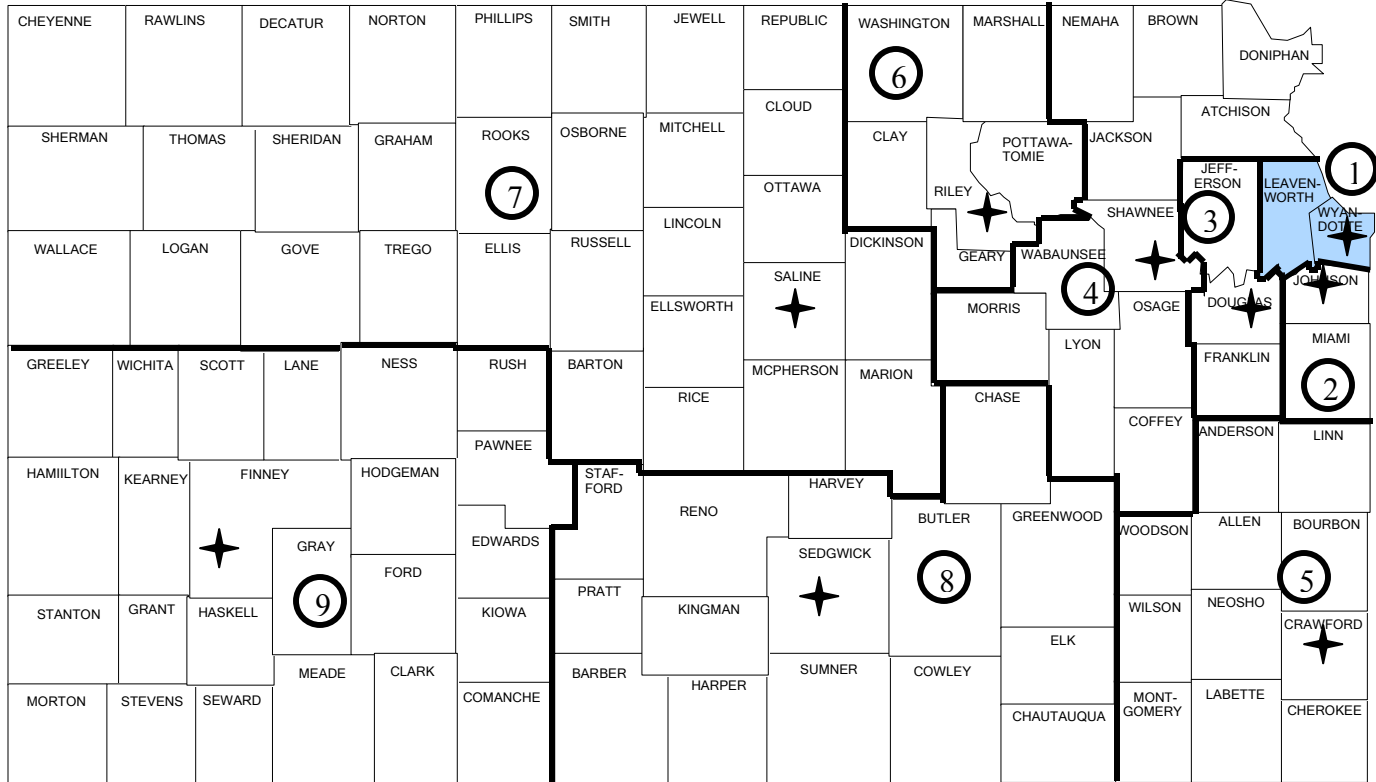
Table 15. Kansas Prevalent HIV/AIDS Cases	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	870	86.3	301	78.8	1171	84.2
FEMALE	138	13.7	81	21.2	219	15.8
RACE/ETHNICITY						
WHITE	680	67.5	219	57.3	899	64.7
BLACK	216	21.4	91	23.8	307	22.1
HISPANIC	95	9.4	46	12	141	10.1
ASIAN	5	0.5	1	0.3	6	0.4
INDIAN	10	1	2	0.5	12	0.9
UNKNOWN	2	0.2	23	6	25	1.8
MODE OF EXPOSURE						
MSM	586	58.1	174	45.6	760	54.7
IDU	108	10.7	49	12.8	157	11.3
MSM/IDU	96	9.5	26	6.8	122	8.8
HET SEX*	142	14.1	55	14.4	197	14.2
NIR	49	4.9	70	18.3	119	8.6
OTHER**	27	2.7	8	2.1	35	2.5
TOTAL CASES	1,008	100	382	100	1,390	100

defined in glossary.

*Het Sex is risk behavior as

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 1



Counties in Region 1: Leavenworth
Wyandotte

2002 Estimated population of Region 1: 229,120

Cases of HIV/AIDS presumed living in Region 1: 312

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 1 is in the northeastern section of Kansas and includes two counties as well as the city of Kansas City, Kansas. Whites make up 60.3% of the region's population, Blacks 23%, Hispanic 13.8%, Asian or Pacific Islanders 2% and less than one percent of the population is Native American. This region has the largest percentage of African Americans in the state.

AIDS Cases Reported 1998-2002

There were 119 AIDS cases reported from Region 1 that were reported between 1998 and 2002, with an overall average yearly rate of 10.4/100,000/year. This is the highest rate in the state. Of those reported, 87% were presumed to be living in Region 1 at the end of 2002. The number of cases was slightly higher among Whites (54 cases) than Blacks (43 cases). However, the rate for Blacks (16.2/100,000/year) was more than twice that of Whites (7.8/100,000/year). Men accounted for 89.1% of the cases. MSM (with or without IDU) accounted for 54.6% of the cases. IDU (with or without MSM among males) accounted for 22.7% of the cases. Among Region 1 AIDS cases between 1998 and 2002, 72.3% of cases were between the ages of 30 and 49 at diagnosis.

Among White AIDS cases reported between 1998 and 2002, 92.6% were among men. Of these men 70% reported MSM regardless of IDU status as the mode of exposure.

There were nine Black women reported with AIDS between 1998 and 2001, for a rate of 6.6/100,000/year. This is more than five times the rate of AIDS in White females (1.2/100,000/year) for the same time period.

Prevalent HIV/AIDS Cases

Race/Ethnicity and Gender

People of color accounted for 51% of the prevalent HIV and AIDS cases. Women of color represent 64% of the cases reported among women and Black men account for 32.1% of the total cases among men.

Mode by Race/Ethnicity

White males account for 59.2% of the prevalent cases reported among men with a mode of exposure of MSM (with or without IDU). However, Black males and Hispanic males represent 67.9% of males reporting IDU as a risk factor. Risky heterosexual sex remains the most prevalent mode of exposure among women of color accounting for 71% of all prevalent cases reporting risky heterosexual sex as the mode of exposure.

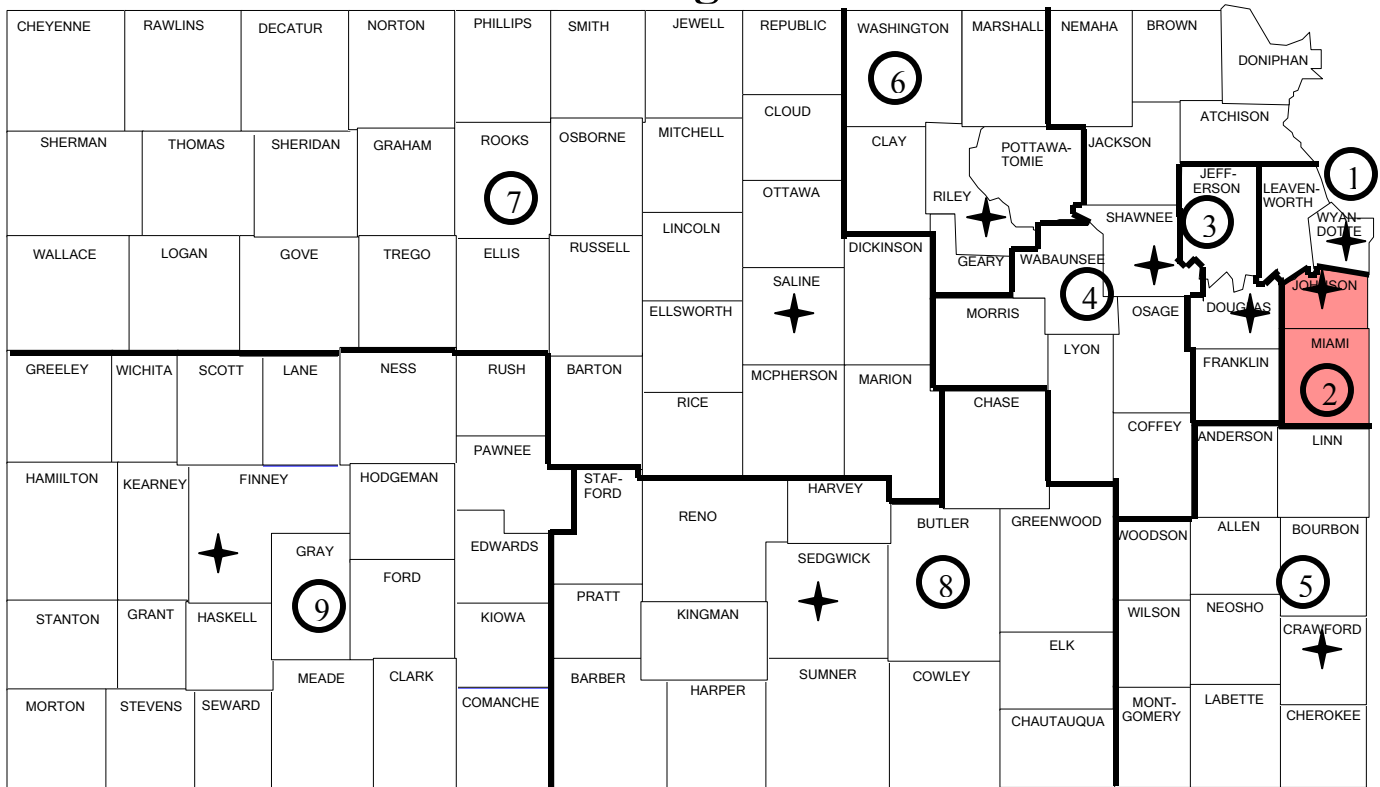
Table 16. Kansas Prevalent HIV/AIDS Cases Living in Region 1	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	208	87.4	54	73	262	84
FEMALE	30	12.6	20	27	50	16
RACE/ETHNICITY						
WHITE	118	49.6	29	39.2	147	47.1
BLACK	83	34.9	26	35.1	109	34.9
HISPANIC	36	15.1	14	18.9	50	16
UNKNOWN	1	0.4	5	6.8	6	1.9
RISK BEHAVIOR						
MSM	123	51.7	31	41.9	154	49.4
IDU	32	13.5	6	8.1	38	12.2
MSM/IDU	23	9.7	2	2.7	25	8
HET SEX*	37	15.6	13	17.6	50	16
NIR	14	5.9	22	29.7	36	11.5
OTHER**	9	3.8	.	.	9	2.9
TOTAL CASES	238	100	74	100	312	100

defined in glossary.

*Het Sex is risk behavior as

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 2



Counties in Region 2: **Johnson**
Miami

2002 Estimated population of Region 2: **505,440**

Cases of HIV/AIDS presumed living in Region 2: **220**

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 2 is also in the northeastern section of Kansas and includes two counties in the Kansas City Metropolitan area. Whites make up 88.6% of the population, African Americans 3.2%, Hispanics 4.2%, Asians 3.5%, and less than 1% of the population is Native American. According to the U.S. Bureau for Economic Analysis, in 2001 Johnson County had the highest per capita personal income (\$44,308) in the Kansas and ranked 32nd in the nation for per capita personal income.

AIDS Cases Reported 1998-2002

There were 73 AIDS cases reported in Region 2 between 1998 and 2002, 65 of whom were still living in Region 2 at the end of 2002. The regional average AIDS rate was 2.9/100,000/year. Men accounted for 89% of the newly reported AIDS cases and MSM (with or without IDU) as a risk for infection accounted for 63% of all cases and 70.8% of all male cases.

Among the cases reported in Whites 72.7% were male reporting MSM (with or without IDU) for mode of exposure. Additional reports on all other race/ethnicity groups are presented in a limited manner due to small sample size and data instability.

Among Blacks 75% were male, 50% were reported with risky heterosexual sex as the mode of exposure, and all were between the ages of 20 and 49. Hispanic cases were 100% male with fairly even distribution of risk and age.

Prevalent HIV/AIDS Cases**Race/Ethnicity and Gender**

Blacks and Hispanics both represent less than 5% of the population in Region 2, however, they represent 11.8% and 5.9% of prevalent HIV/AIDS cases, respectively.

Modes by Race/Ethnicity

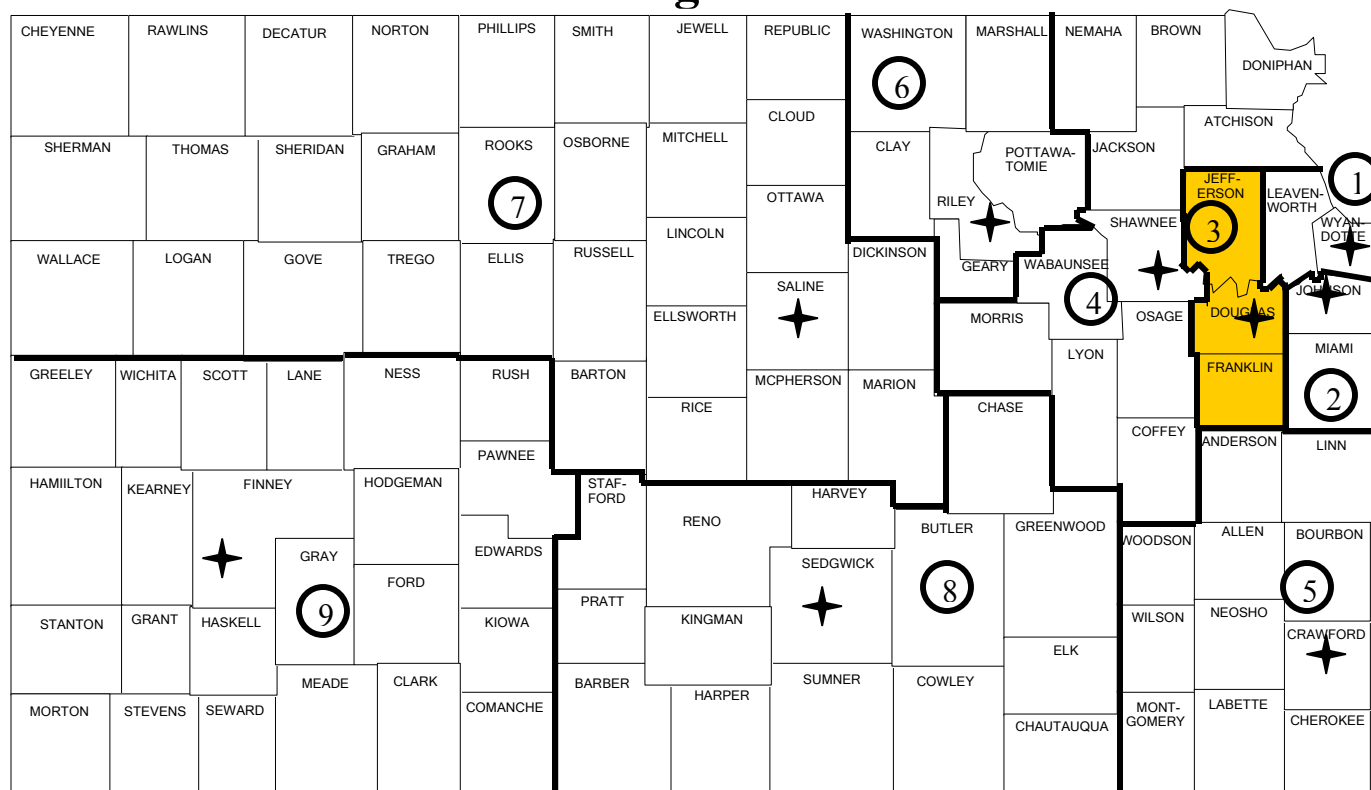
White males account for 74.7% of the prevalent cases among men who report a risk factor of MSM (with or without IDU). Whites also account for 85.7% of the prevalent cases reporting IDU as a risk factor. Risky heterosexual sex as a reported mode of exposure is distributed mainly between Whites (58.3%) and Blacks (37.5%).

Table 17. Kansas Prevalent HIV/AIDS Cases Living in Region 2	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	150	90.4	44	81.5	194	88.2
FEMALE	16	9.6	10	18.5	26	11.8
RACE/ETHNICITY						
WHITE	135	81.3	32	59.3	167	75.9
BLACK	16	9.6	10	18.5	26	11.8
HISPANIC	11	6.6	2	3.7	13	5.9
ASIAN	3	1.8	0	0	3	1.4
INDIAN	1	0.6	0	0	1	0.5
UNKNOWN	0	0	10	18.5	10	4.6
RISK BEHAVIOR						
MSM	101	60.8	30	55.6	131	59.6
IDU	10	6	4	7.4	14	6.4
MSM/IDU	15	9	4	7.4	19	8.6
HET SEX*	20	12.1	4	7.4	24	10.9
NIR	15	9	12	22.2	27	12.3
OTHER**	5	3	0	0	5	2.3
TOTAL CASES	166	100	54	100	220	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 3



Counties in Region 3: **Douglas
Franklin
Jefferson**

2002 Estimated population of Region 3: **146,302**

Cases of HIV/AIDS presumed living in Region 3: **51**

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

The third region found in the northeastern section of Kansas and comprised of three counties is Region 3. Douglas County includes the main campus of the University of Kansas and Haskell Indian Nations University. Whites account for 88.4% of the population, Blacks 3.6%, Hispanics 3.2%, Asians 2.6%, and 2.2% of the population is Native American. Region 3 holds the largest proportion of Native Americans, however, the largest population is in Region 8.

AIDS Cases Reported 1998-2002

There were 18 AIDS cases reported in Region 3 between 1998 and 2002. Of those 18 cases, 15 were still living in Region 3 at the end of 2002. The regional average AIDS rate for Region 3 was 2.5/100,000/year. Due to the small number of cases in this region, discussion is limited in order to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may incorrectly suggest dramatic changes in rates actually attributable to artifactual variation. Therefore, these changes will not necessarily be reflective of changes in the epidemic in the region.

The median age at AIDS diagnosis was 43.5 years of age, the highest median among all regions. Whites account for 72.2% of the reported AIDS cases from 1998 to 2002 and 83.3% of cases reported MSM as a risk for infection.

Prevalent HIV/AIDS Cases

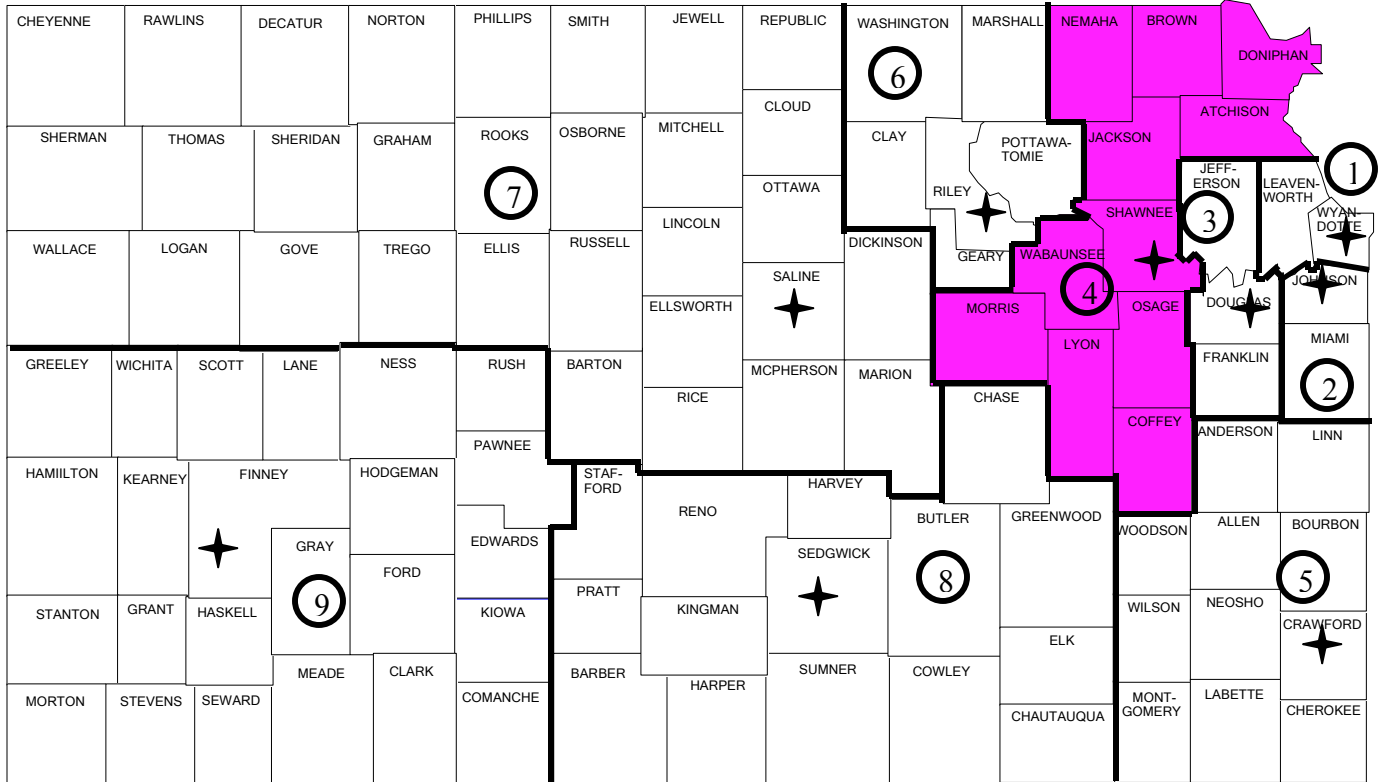
White males account for 78.9% of the prevalent cases reported among men with a risk factor of MSM (with or without IDU). All of the reported IDU cases among men are White. Seventy-five percent of cases among women were White.

Table 18. Kansas Prevalent HIV/AIDS Cases Living in Region 3	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	35	85.4	8	80	43	84.3
FEMALE	6	14.6	2	20	8	15.7
RACE/ETHNICITY						
WHITE	33	80.5	7	70	40	78.4
BLACK	6	14.6	2	20	8	15.7
HISPANIC	0	0	1	10	1	2
INDIAN	1	2.4	0	0	1	2
UNKNOWN	1	2.4	0	0	1	2
RISK BEHAVIOR						
MSM	27	65.9	6	60	33	64.7
IDU	2	4.9	1	10	3	5.9
MSM/IDU	4	9.8	1	10	5	9.8
HET SEX*	6	14.6	1	10	7	13.7
NIR	1	2.4	1	10	2	3.9
OTHER**	1	2.4	0	0	1	2
TOTAL CASES	41	100	10	100	51	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 4



Counties in Region 4:

Atchison
Brown
Coffey
Doniphan

Jackson
Lyon
Morris
Nemaha

Osage
Shawnee
Wabaunsee

2002 Estimated population of Region 4:

303,882

Cases of HIV/AIDS presumed living in Region 4:

122

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 4 is in the north central section of Kansas, and includes eleven counties as well as the capital city, Topeka. Whites account for 84.3% of the population, Blacks 6.3%, Hispanics 7%, Asians 1%, and 1.4% of the population is Native American.

AIDS Cases Reported 1998-2002

There were 60 cases reported between 1998 and 2002 for an average yearly rate of 3.9/100,000/year. There were 51 males and 9 females reported with AIDS and 47 (78%) were presumed to be living in Region 4 at the end of 2002.

Among Whites, MSM (with or without IDU) accounted for 28 cases (46.7% of all cases).

Unprotected risky heterosexual sex was reported as the risk factor for 8 of the 9 females. There were 7 Hispanics of which 5 were male.

Prevalent HIV/AIDS Cases

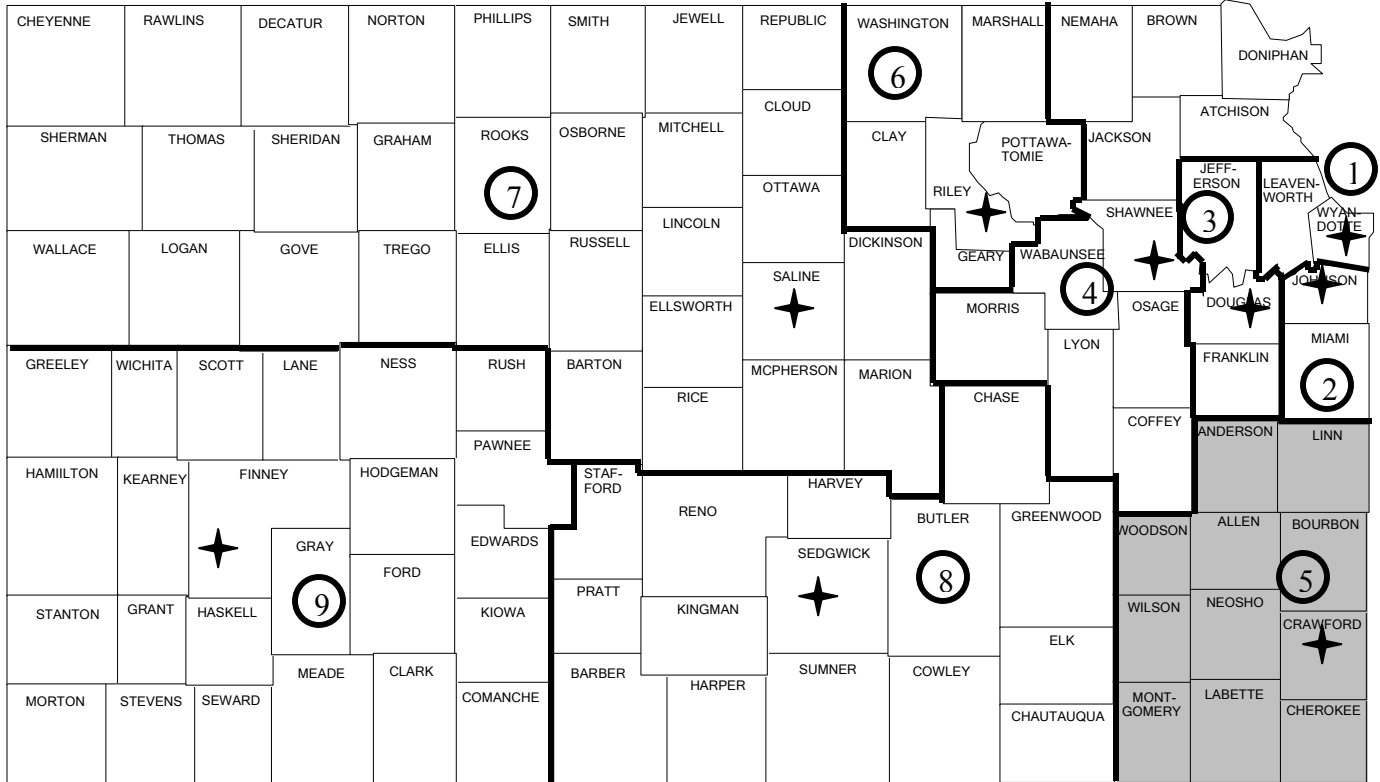
White males account for 74% of the prevalent cases among men who reported MSM (with or without IDU) and 66.7% of the male prevalent cases reporting a risk of IDU. Women of color represent 58.8% of the prevalent cases among women although the numbers are small and therefore unstable.

Table 19. Kansas Prevalent HIV/AIDS Cases Living in Region 4	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	79	87.8	26	81.3	105	86.1
FEMALE	11	12.2	6	18.8	17	13.9
RACE/ETHNICITY						
WHITE	60	66.6	20	62.5	80	65.6
BLACK	22	24.4	12	37.5	34	27.9
HISPANIC	7	7.8	0	0	7	5.7
INDIAN	1	1.1	0	0	1	0.8
RISK BEHAVIOR						
MSM	51	56.7	13	40.6	64	52.5
IDU	10	11.1	5	15.6	15	12.3
MSM/IDU	8	8.9	5	15.6	13	10.7
HET SEX*	14	15.6	4	12.5	18	14.8
NIR	5	5.6	5	15.6	10	8.2
OTHER**	2	2.2	0	0	2	1.6
TOTAL CASES	90	100	32	100	122	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 5



Counties in Region 5:

Allen	Crawford	Neosho
Anderson	Labette	Wilson
Bourbon	Linn	Woodson
Cherokee	Montgomery	

2002 Estimated population of Region 5:

195,268

Cases of HIV/AIDS presumed living in Region 5:

41

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 5 is in the southeastern section of Kansas and includes eleven counties. The region borders on both Oklahoma and Missouri. Whites account for 92.3% of the population, Blacks 2.9%, Hispanics 2.3%, Native Americans 2%, and less than one percent of the population is Asian.

AIDS Cases Reported 1998-2002

There were 16 cases of AIDS reported in Region 5 between 1998 and 2002, of which 87.5% were White. Nine of the sixteen were presumed to be living in Region 5 at the end of 2002. The average annual AIDS rate for this time period was 1.6/100,000/year, the lowest of any region. Due to the small number of cases in this region discussion will be limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may incorrectly suggest dramatic changes in rates actually attributable to artifactual variation. Therefore, these changes will not necessarily be reflective of changes in the epidemic in the region.

Of the AIDS cases reported between 1998 and 2002, 56.3% were presumed to be still living in Region 5 at the end of 2002.

The median age at AIDS diagnosis for this region was 42.5, which was the second highest median age in all of the regions. Seven (43.8%) of the 16 cases reported MSM (with or without IDU) as the mode of exposure; this is the lowest proportion of MSM in any region.

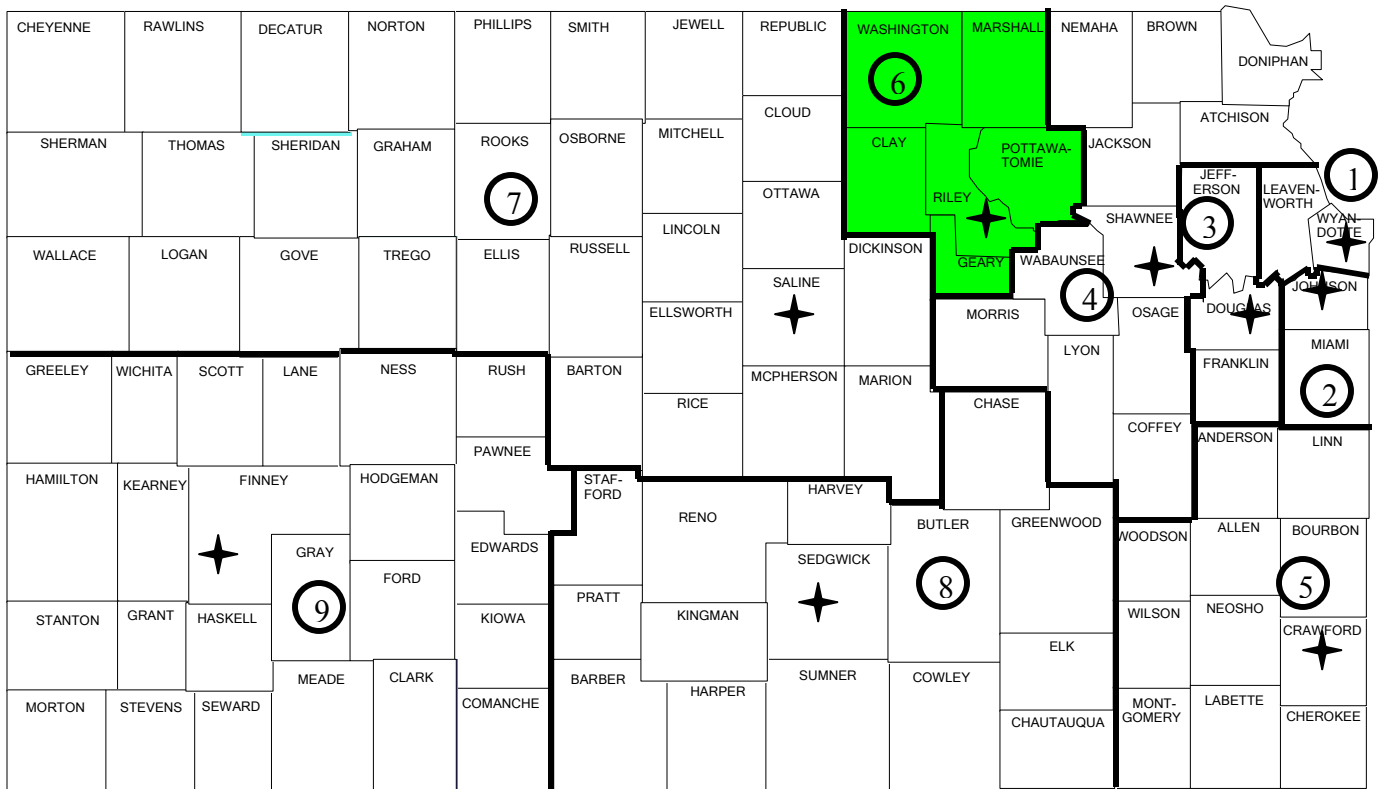
Prevalent HIV/AIDS Cases

Region 5 has the smallest number of prevalent cases of any of the regions in Kansas. White males account for 90.5% of the prevalent male cases reporting MSM (with or without IDU) as a risk for infection. White females reporting risky heterosexual sex account for 58.3% of all female prevalent cases.

Table 20. Kansas Prevalent HIV/AIDS Cases Living in Region 5	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	16	69.6	13	72.2	29	70.7
FEMALE	7	30.4	5	27.8	12	29.3
RACE/ETHNICITY						
WHITE	21	91.3	12	66.7	33	80.5
BLACK	0	0	5	27.8	5	12.2
HISPANIC	1	4.4	1	5.6	2	4.9
INDIAN	1	4.4	0	0	1	2.4
RISK BEHAVIOR						
MSM	10	43.5	5	27.8	15	36.6
IDU	1	4.4	3	16.7	4	9.8
MSM/IDU	5	21.7	1	5.6	6	14.6
HET SEX*	6	26.1	6	33.3	12	29.3
NIR	1	4.4	3	16.7	4	9.8
TOTAL CASES	23	100	18	100	41	100

*Het Sex is risk behavior as defined in glossary.

Region 6



Counties in Region 6: **Clay** **Pottawatomie**
 Geary **Riley**
 Marshall **Washington**

2002 Estimated population of Region 6: **131,937**

Cases of HIV/AIDS presumed living in Region 6: **42**

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 6 is in the north central section of Kansas. Six counties make up Region 6, which also includes a major military base and the main campus of Kansas State University. This region has the smallest population of the nine AIDS regions. Whites make up 84.5% of the population, Blacks 7.9%, Hispanics 4.2%, Asians 2.7%, and less than one percent of the cases are Native Americans.

AIDS Cases reported 1998-2002

There were 24 cases of AIDS reported between 1998 and 2002 in Region 6. The average annual AIDS rate was 3.6/100,000/year and 20 (83.3%) of the cases were presumed to be living in Region 6 at the end of 2002. Due to the small number of cases in this region discussion will be limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may incorrectly suggest dramatic changes in rates actually attributable to artifactual variation. Therefore, these changes will not necessarily be reflective of changes in the epidemic in the region.

There were 18 males and six females reported in this region between 1998 and 2002. Therefore, nearly forty-percent of HIV/AIDS cases in this region are female. This is higher than any other region in the state. However, again due to small total numbers any further analysis would be of limited usefulness and not statistically meaningful. Sixteen (66.7%) of the 24 cases reported MSM (with or without IDU) as the mode of exposure.

Prevalence HIV/AIDS Cases

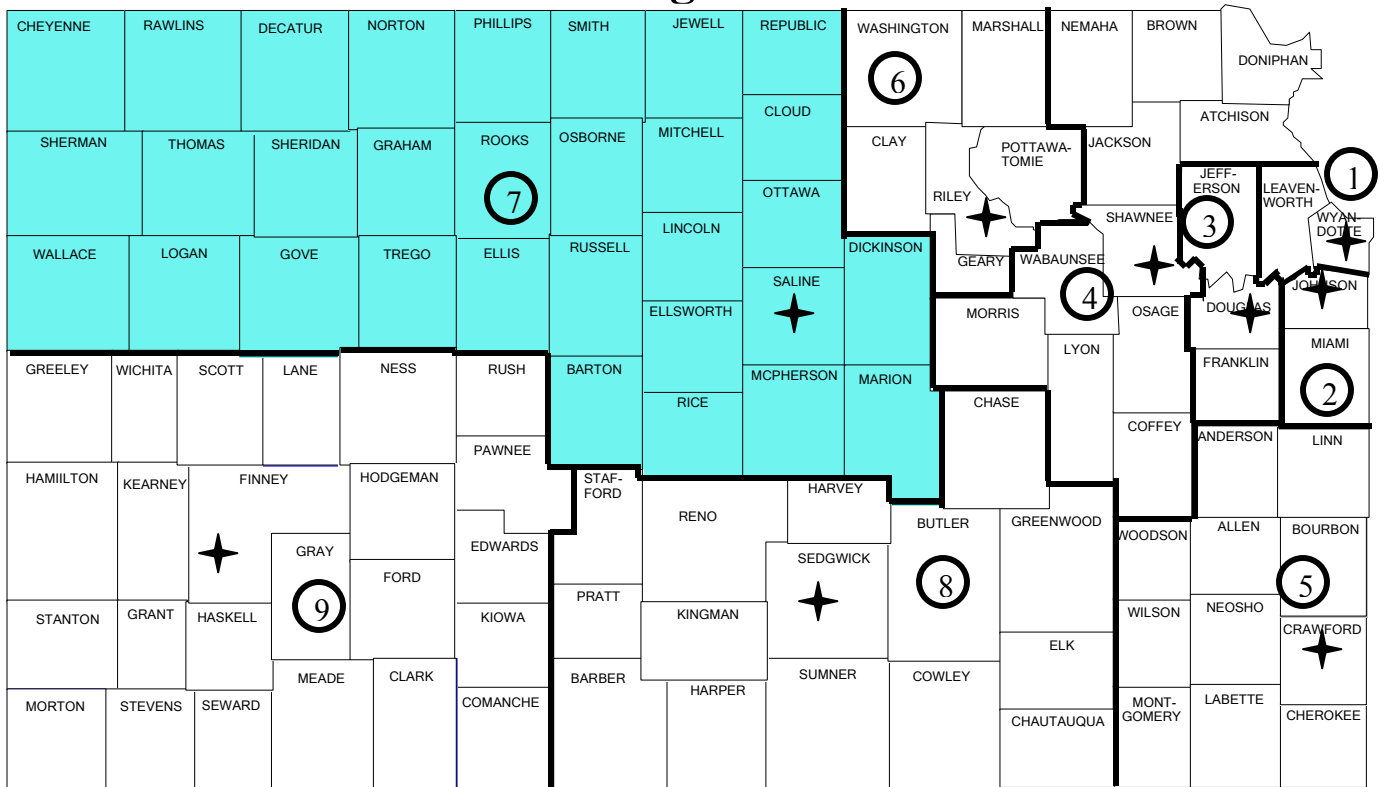
White males represent 61.1% of the prevalent cases among men with a reported risk factor of MSM (with or without IDU).

Table 21. Kansas Prevalent HIV/AIDS Cases Living in Region 6	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	17	58.6	8	61.5	25	59.5
FEMALE	12	41.4	5	38.5	17	40.5
RACE/ETHNICITY						
WHITE	19	65.5	5	38.5	24	57.1
BLACK	8	27.6	3	23.1	11	26.1
HISPANIC	1	3.5	3	23.1	4	9.5
INDIAN	1	3.5	0	0	1	2.4
UNKNOWN	0	0	2	15.4	2	4.8
RISK BEHAVIOR						
MSM	13	44.8	2	15.4	15	35.7
IDU	5	17.2	2	15.4	7	16.7
MSM/IDU	2	6.9	0	0	2	4.7
HET SEX*	8	27.6	3	23.1	11	26.2
NIR	0	0	5	38.5	5	11.9
OTHER**	1	3.5	1	7.7	2	4.8
TOTAL CASES	29	100	13	100	42	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 7



Counties in Region 7

Barton
Cheyenne
Cloud
Decatur
Dickinson
Ellis
Ellsworth
Gove
Graham
Jewell

Lincoln
Logan
Marion
McPherson
Mitchell
Norton
Osborne
Ottawa
Phillips
Rawlins

Republic
Rice
Rooks
Russell
Saline
Sheridan
Sherman
Smith
Thomas
Trego

Wallace

2002 Estimated population of Region 7:

296,185

Cases of HIV/AIDS presumed living in Region 7:

57

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 7 includes 32 counties that occupy most of the northwestern quarter of Kansas. Thirteen of the counties in Region 7 are considered frontier counties, defined as an average population density of less than six persons per square mile. Whites account for 93.6% of the population (the largest percentages of Whites in the state), Blacks 1.5%, Hispanics 3.7%, and less than one percent of the population is Asian or Native American.

AIDS Cases reported 1998-2002

There were 25 cases of AIDS reported between 1998 and 2002 of which, 19 were presumed to be living in Region 7 at the end of 2002. The average annual AIDS rate was 1.7/100,000/year. Due to the small number of cases in this region discussion will be limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may incorrectly suggest dramatic changes in rates actually attributable to artifactual variation. Therefore, these changes will not necessarily be reflective of changes in the epidemic in the region.

Of the 25 cases, 20(80%) were men. There were 13 cases (52%) reporting MSM (with or without IDU).

Prevalent HIV/AIDS Cases

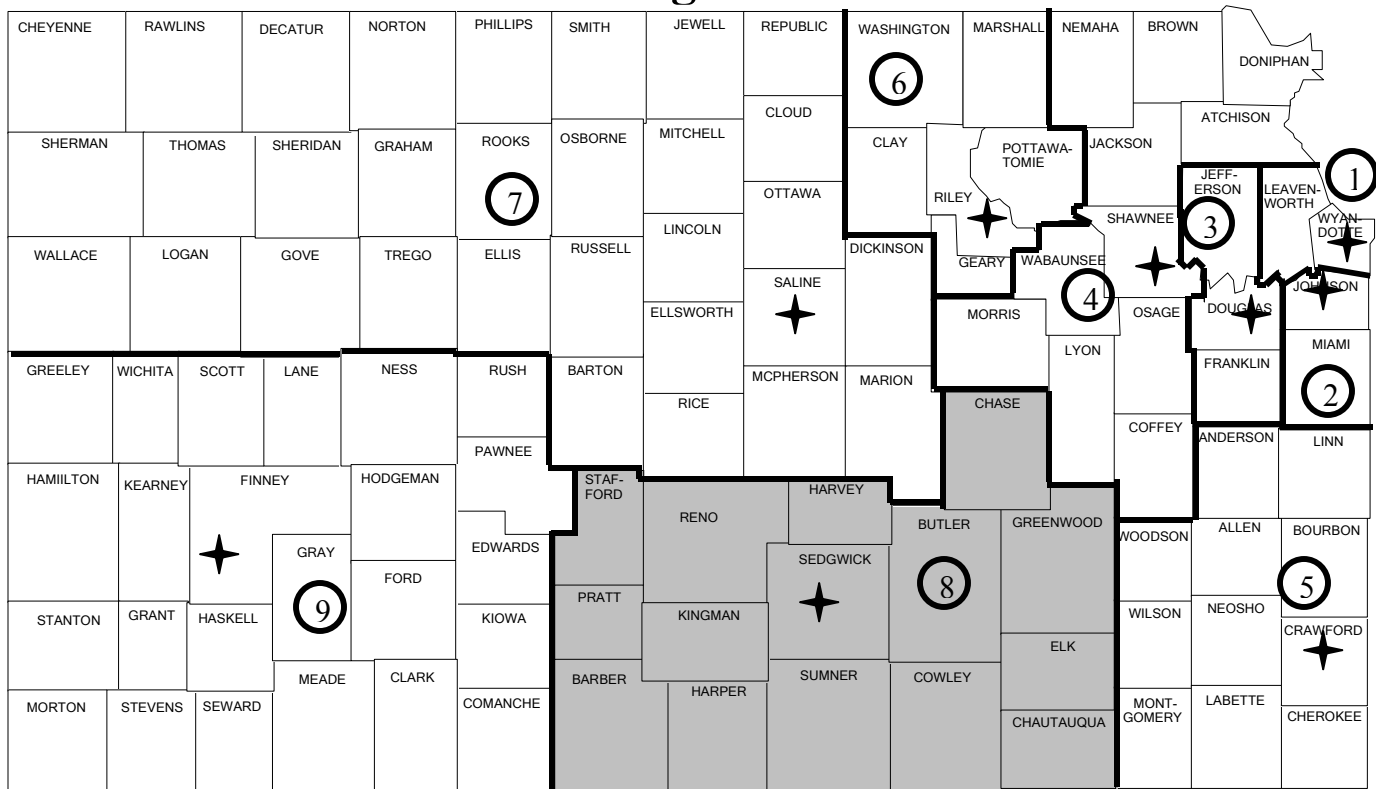
White males account for 71.4% of the prevalent cases among men reporting MSM (with or without IDU) as the mode of exposure. Among males Whites and Blacks each account for 44.4% of the male cases reporting IDU as a risk factor. White females account for 66.7% of all female prevalent cases. Additionally, among females Whites and Blacks each account for 50% of the cases reporting risky heterosexual sex.

Table 22. Kansas HIV/AIDS Prevalent Cases Living in Region 7	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	35	87.5	10	58.8	45	79
FEMALE	5	12.5	7	41.2	12	21.1
RACE/ETHNICITY						
WHITE	31	77.5	7	41.2	38	66.7
BLACK	7	17.5	6	35.3	13	22.8
HISPANIC	2	5	3	17.7	5	8.8
UNKNOWN	0	0	1	5.9	1	1.8
RISK BEHAVIOR						
MSM	22	55	6	35.3	28	49.1
IDU	8	20	6	35.3	14	24.6
MSM/IDU	6	15	1	5.9	7	12.3
HET SEX*	2	5	2	11.8	4	7
NIR	0	0	1	5.9	1	1.8
OTHER**	2	5	1	5.9	3	5.3
TOTAL CASES	40	100	17	100	57	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 8



Counties in Region 8:

Barber	Elk	Pratt
Butler	Greenwood	Reno
Chase	Harper	Sedgwick
Chautauqua	Harvey	Stafford
Cowley	Kingman	Sumner

2000 Estimated population of Region 8:

733,519

Cases of HIV and AIDS presumed living in Region 8:

495

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 8 includes 15 counties in south central Kansas. The region includes the state's largest city, Wichita, and is the most populous of all the regions. Whites account for 82% of the population, Blacks 6.8%, Hispanics 7.3%, Asian 2.7%, and 1.1% of the population is Native American.

AIDS Cases Reported 1998-2002

There were 198 AIDS cases reported between 1998 and 2002, of those cases 165 were presumed to be living in Region 8 at the end of 2002. The average annual AIDS rate during this time period was 5.4/100,000/year. This region maintains the largest case total, however, Region 1 has the highest rate of infection. There were 164 men (82.8%) and 34 women (17.2%) reported from 1998 to 2002. There were 126 reporting MSM as a mode of exposure which accounts for 63.6% of all AIDS cases reported in that time period.

The median age of those diagnosed in the same time period was 36 years. All of the cases were over the age of 18 at diagnosis and 72.2% were over the age of 30.

Among the 119 Whites reported with AIDS in the most recent five-year period, 11.7% reported IDU as the risk for infection. White males accounted for 65.8% of those reporting MSM. Among the 17 White females reported with AIDS in this time period, 58.8% reported a mode of exposure of risky heterosexual sex.

Among 55 Black AIDS cases, the leading mode of exposure reported between 1998 and 2002 was MSM (with or without IDU) accounting for 52.7% of these cases. However, 25.5% of all Black cases reported risky heterosexual sex as the mode of exposure, Black women account for more than half of these cases. Risky heterosexual sex is the leading risk factor for women responsible for 61.5% of AIDS cases among female Blacks.

Of the 20 Hispanics reported between 1998 and 2002, 60% were reported with a mode of exposure designated as MSM (with or without IDU). Risky heterosexual sex and IDU tied for the second leading risk factor reported among Hispanics in this time period.

HIV Cases Since 1999

There have been 142 HIV cases reported in Region 8 since 1999. White men account for 90 of this 142 and 77.8% of White men reported MSM (with or without IDU) as a risk factor for contracting HIV. Among White females, 55.6% reported risky heterosexual sex as their only risk.

Prevalent HIV/AIDS Cases

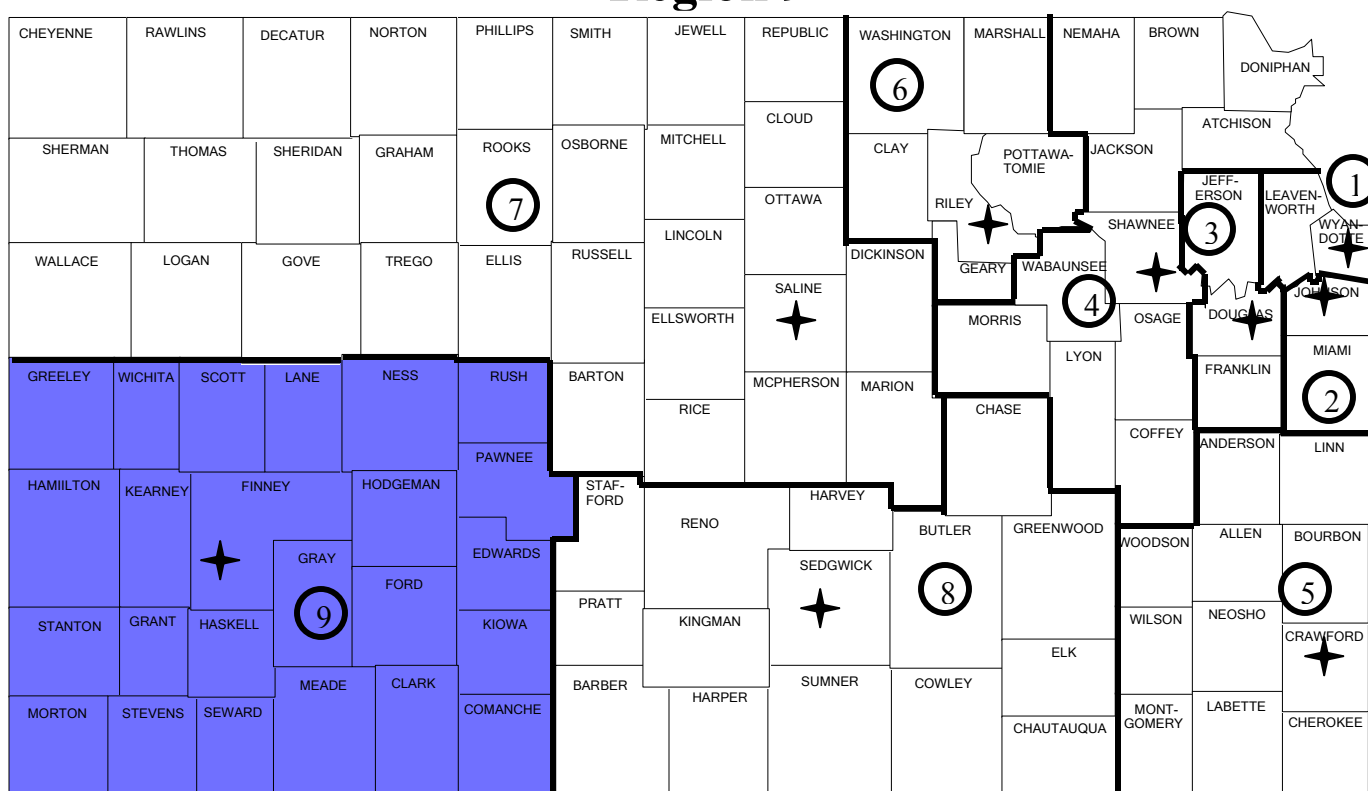
Women of color represent 45.5% of all prevalent female HIV/AIDS cases. Fifty percent of those women report risky heterosexual sex as their only risk factor. White men account for 62.4% of all prevalent HIV/AIDS cases and 75.1% of men reporting MSM (with or without IDU) as the mode of exposure. Men of color represent 45.5% of male cases reporting IDU as a risk. Women of color represent 38.5% of female prevalent cases reporting risky heterosexual sex as the only risk factor.

Table 23. Kansas Prevalent HIV/AIDS Cases Living in Region 8	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	305	86.4	124	87.3	429	86.7
FEMALE	48	13.6	18	12.7	66	13.3
RACE/ETHNICITY						
WHITE	246	69.7	99	69.7	345	69.7
BLACK	73	20.7	26	18.3	99	20
HISPANIC	27	7.6	10	7	37	7.5
ASIAN	2	0.6	1	0.7	3	0.6
INDIAN	5	1.4	2	1.4	7	1.4
UNKNOWN	.	.	4	2.8	4	0.8
RISK BEHAVIOR						
MSM	224	63.5	77	54.2	301	60.8
IDU	35	9.9	13	9.1	48	9.7
MSM/IDU	33	9.4	12	8.5	45	9.1
HET SEX*	45	12.8	17	12	62	12.5
NIR	10	2.8	17	12	27	5.5
OTHER**	6	1.7	6	4.2	12	2.4
TOTAL CASES	353	100	142	100	495	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Region 9



Counties in Region 9 :

Clark	Hamilton	Ness
Comanche	Haskell	Pawnee
Edwards	Hodgeman	Rush
Finney	Kearny	Scott
Ford	Kiowa	Seward
Grant	Lane	Stanton
Gray	Meade	Stevens
Greeley	Morton	Wichita

2000 Estimated population of Region 9:

174,231

Cases of HIV and AIDS presumed living in Region 9:

46

HIV/AIDS Case Counts Reported as of 12/31/2002

Regional Information

Region 9 comprises much of the southwestern corner of Kansas and includes 24 counties, 15 of which are considered frontier counties and average less than 6 persons per square mile. Whites make up 66.1% of the population, Blacks 1.4%, Hispanics 30.4%, Asians 1.6%, and less than one percent of the population is Native American. There are proportionately more Hispanics living in Region 9 than in any other region. However, the largest Hispanic population is in Region 8.

AIDS Cases reported 1998-2002

There were 20 AIDS cases reported between 1998-2002 in Region 9, of those 13 are presumed to be living. The average annual AIDS rate for this time period is 11.5/100,000/year. Due to the small number of cases in this region discussion will be limited to protect confidentiality. With the inherent instability of small numbers, small changes in numbers may incorrectly suggest dramatic changes in rates actually attributable to artifactual variation. Therefore, these changes will not necessarily be reflective of changes in the epidemic in the region.

Most of the diagnosed and reported cases were males, with fewer than five females reported between 1998 and 2002. There were ten Whites, nine Hispanics, and one Black case reported during this time period.

Prevalent HIV/AIDS Cases

Region 9 has the highest proportion of Hispanics reported with HIV/AIDS. Hispanics account for nearly half of all cases in the region, though the total number is small. Of the Hispanic cases, 81.8% are male. Hispanic males account for 75% of male cases reporting IDU as a risk factor. Additionally, White males account for 70.6% of all male cases reporting MSM as a risk factor. White females represent 83.3% of all female cases reporting IDU as the mode of exposure.

Table 24. Kansas Prevalent HIV/AIDS Cases Living in Region 9	CATEGORY				TOTAL CASES	
	AIDS PREVALENCE		HIV PREVALENCE			
	N	%	N	%	N	%
GENDER						
MALE	24	88.9	11	57.9	35	76.1
FEMALE	3	11.1	8	42.1	11	23.9
RACE/ETHNICITY						
WHITE	17	63	7	36.8	24	52.2
HISPANIC	10	37	12	63.2	22	47.8
RISK BEHAVIOR						
MSM	15	55.6	2	10.5	17	37
IDU	5	18.5	9	47.4	14	30.4
HET SEX*	4	14.8	5	26.3	9	19.6
NIR	2	7.4	3	15.8	5	10.9
OTHER**	1	3.7	.	.	1	2.2
TOTAL CASES	27	100	19	100	46	100

*Het Sex is risk behavior as defined in glossary.

**HIV/AIDS resulting from receiving contaminated blood products or pediatric transmission.

Part III

Bacterial Sexually Transmitted Diseases

Overview

Chlamydia, gonorrhea and syphilis are reportable diseases in Kansas, similar to HIV and AIDS. Available data on STDs are a marker of unprotected sexual activity. Since nearly 80% of the Kansas HIV and AIDS cases report unprotected sex as a risk behavior, STD epidemiology may aid in identifying populations at risk for HIV and for targeting prevention and intervention programs.

Among reported cases of bacterial STDs, racial and ethnic minorities are disproportionately represented. This may reflect reporting bias (e.g., Blacks may use public STD clinics more often for health care and be more likely to be screened or reported if positive). The majority of syphilis cases are reported from public STD clinics, whereas chlamydia and gonorrhea infections are reported from private physicians. Over two thirds of reported bacterial STD reports are from private providers rather than publicly funded STD and family planning clinics.

More information on bacterial STDs in Kansas can be found at:
www.kdhe.state.ks.us/hiv-std.

Chlamydia

In 2002, 6,758 cases of chlamydia were diagnosed in Kansas as shown in Table 25. This represents a 9% increase in diagnosed chlamydia cases when compared to 2001. Of the 6,758 cases diagnosed in 2002, 69% (4,674 cases) were diagnosed through private facilities as shown in Table 26.

Table 25. Chlamydia Cases by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001	2002
White	3,048	2,967	2,831	2,978
Black	2,125	1,963	1,887	858
Hispanic	716	792	793	852
Asian	77	73	68	73
Native American	59	61	63	82
Unknown	39	237	530	915
Total	6,064	6,093	6,172	6,758

Table 26. Chlamydia Cases Diagnosed in 2002 by Facility Type and Race/Ethnicity

Race/Ethnicity	Public Facility*	Private Facility**	Total
White	1,014	1,964	2,978
Black	616	1,242	1,858
Hispanic	387	465	852
Asian	19	54	73
Native American	19	63	82
Unknown	29	886	915
Total	2,084	4,674	6,758

*Public facility is a local health department.

**Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

As shown in Table 27, females represent 83% (5,634 cases) of the chlamydia cases diagnosed in 2002. This may be a result of the Infertility Prevention (Chlamydia Control) Project, which focuses screening efforts toward females. Of the 5,635 cases diagnosed among females, 70.2% (3,956 cases) were diagnosed through a private facility.

Table 27. Chlamydia Cases Diagnosed in 2002 by Race/Ethnicity, Gender, and Facility

	Male		Female		
<i>Race/Ethnicity</i>	Public Facility*	Private Facility**	Public Facility*	Private Facility**	Total
White	158	250	855	1,707	2,970
Black	179	237	437	1,003	1,856
Hispanic	61	67	327	398	853
Asian	2	5	17	48	72
Native American	1	13	17	52	83
Unknown	4	146	26	748	924
Total	405	718	1,679	3,956	6,758

*Public facility is a local health department.

**Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Table 28. Rate per 100,000 per year by Region of Chlamydia Cases Diagnosed in 2002

Region	Total Cases per Region	Rate*
Region 1	1,222	850.6
Region 2	736	225.1
Region 3	396	391.4
Region 4	838	453.8
Region 5	335	291.9
Region 6	440	506.6
Region 7	365	210.9
Region 8	2,103	469.7
Region 9	323	310.3
Total	6,758	401.6

*Rates were calculated by using the 2002 Census population estimates for people aged 15-59 in each region.

Gonorrhea

In 2002, 2,700 cases of gonorrhea were diagnosed in Kansas as shown in Table 29. This is similar to the number of gonorrhea cases diagnosed in 2001.

Table 29. Gonorrhea Cases by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001	2002
White	691	740	692	725
Black	1,849	1,736	1,679	1,532
Hispanic	156	181	204	167
Asian	22	18	13	11
Native American	19	15	13	12
Unknown	78	17	160	253
Total	2,815	2,671	2,761	2,700

Table 30. Gonorrhea Cases Diagnosed in 2002 by Facility Type and Race/Ethnicity

Race/Ethnicity	Public Facility*	Private Facility**	Total
White	264	461	725
Black	659	873	1,532
Hispanic	70	97	167
Asian	4	7	11
Native American	3	9	12
Unknown	9	244	253
Total	1,009	1691	2700

*Public facility is a local health department.

**Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Of the 2,700 cases diagnosed in 2002, 62.6 % (1691 cases) were diagnosed through private facilities as shown in Table 30.

As shown in Table 31, females represent 56.6% (1,528 cases) of the gonorrhea cases diagnosed in 2002. Of the 1,528 cases diagnosed among females, 68.5% (1,047 cases) were diagnosed through a private facility.

Table 31. Gonorrhea Cases Diagnosed in 2002 by Race/Ethnicity, Gender, and Facility

Race/Ethnicity	Male		Female		Total
	Public Facility*	Private Facility**	Public Facility*	Private Facility**	
White	87	107	177	354	725
Black	406	371	253	502	1,532
Hispanic	27	42	43	55	167
Asian	2	2	2	5	11
Native American	0	4	3	5	12
Unknown	6	118	3	126	253
Total	528	644	481	1,047	2,700

*Public facility is a local health department.

**Private facility is a private physician's office or hospital (inpatient, outpatient, or ER).

Region 1 and Region 8 represent 30.6% and 34.2% of the gonorrhea cases diagnosed in 2002 respectively as shown in Table 32. Region 1 had the highest rate of gonorrhea cases diagnosed in 2002 as shown in Table 32.

Table 32. Rate per 100,000 per year by Region of Gonorrhea Cases Diagnosed in 2002

Region	Total Cases By Region	Rate*
Region 1	829	577.0
Region 2	191	58.4
Region 3	83	82.0
Region 4	363	196.6
Region 5	58	50.5
Region 6	92	105.9
Region 7	48	27.7
Region 8	973	217.3
Region 9	64	61.5
Total	2,701	160.5

*Rates were calculated by using the 2002 Census population estimates for people aged 15-59 in each region.

Syphilis

The number of syphilis cases in Kansas has decreased from 44 cases in 2001 to 39 cases in 2002 as shown in Table 33.

Table 33. Syphilis by Year of Diagnosis and Race/Ethnicity

Race/Ethnicity	1999	2000	2001	2002	Total
White	10	3	12	14	25
Black	14	6	22	19	42
Hispanic	5	5	10	6	20
Asian	1	0	0	0	1
Native American	0	0	0	0	0
Total	30	14	44	39	88

All syphilis cases diagnosed in 2002 were treated.

Table 34. Syphilis Cases by Year of Diagnosis, Race/Ethnicity, and Gender

	1999		2000		2001		2002	
Race/Ethnicity	Male	Female	Male	Female	Male	Female	Male	Female
White	3	2	3	0	7	5	5	9
Black	5	9	5	1	11	11	12	7
Hispanic	5	0	3	2	5	5	5	1
Asian	0	1	0	0	0	0	0	0
Native American	0	0	0	0	0	0	0	0
Total	13	17	11	3	23	21	22	17

These cases were evenly distributed in the highly populated regions (Regions 1,4,6, and 8)

Appendix A

1999 Revised Surveillance Case Definition for HIV infection

December 10, 1999 / 48(RR13); 29-31

This revised definition of HIV infection, which applies to any HIV (e.g., HIV-1 or HIV-2), is intended for public health surveillance only. It incorporates the reporting criteria for HIV infection and AIDS into a single case definition. The revised criteria for HIV infection update the definition of HIV infection implemented in 1993 (18); the revised HIV criteria apply to AIDS-defining conditions for adults (18) and children (17,19), which require laboratory evidence of HIV. This definition is not presented as a guide to clinical diagnosis or for other uses (17,18).

I. In adults, adolescents, or children aged greater than or equal to 18 months, a reportable case of HIV infection must meet at least one of the following criteria:**

Laboratory Criteria

- a. Positive result on a screening test for HIV antibody (e.g., repeatedly reactive enzyme immunoassay), followed by a positive result on a confirmatory (sensitive and more specific) test for HIV antibody (e.g., Western blot or immunofluorescence antibody test)
- or
- b. Positive result or report of a detectable quantity on any of the following HIV virologic (nonantibody) tests:
 - 1. HIV nucleic acid (DNA or RNA) detection (e.g., DNA polymerase chain reaction [PCR] or plasma HIV-1 RNA)***
 - 2. HIV p24 antigen test, including neutralization assay
 - 3. HIV isolation (viral culture)
- or***

Clinical or Other Criteria (if the above laboratory criteria are not met)

- a. Diagnosis of HIV infection, based on the laboratory criteria above, that is documented in a medical record by a physician
- or
- b. Conditions that meet criteria included in the case definition for AIDS (17-19)

II. In a child aged less than 18 months, a reportable case of HIV infection must meet at least one of the following criteria:

Laboratory Criteria

Definitive

- a. Positive results on two separate specimens (excluding cord blood) using one or more of the following HIV virologic (nonantibody) tests:
 - i. HIV nucleic acid (DNA or RNA) detection
 - ii. HIV p24 antigen test, including neutralization assay, in a child greater than or equal to 1 month of age
 - iii. HIV isolation (viral culture)

or

Presumptive

A child who does not meet the criteria for definitive HIV infection but who has:

- a. Positive results on only one specimen (excluding cord blood) using the above HIV virologic tests and no subsequent negative HIV virologic or negative HIV antibody tests

or

Clinical or Other Criteria (if the above definitive or presumptive laboratory criteria are not met)

- b. Diagnosis of HIV infection, based on the laboratory criteria above, that is documented in a medical record by a physician

or

- c. Conditions that meet criteria included in the 1987 pediatric surveillance case definition for AIDS (17,19)

III. A child aged less than 18 months born to an HIV-infected mother will be categorized for surveillance purposes as "not infected with HIV" if the child does not meet the criteria for HIV infection but meets the following criteria:

Laboratory Criteria

Definitive

- a. At least two negative HIV antibody tests from separate specimens obtained at greater than or equal to 6 months of age
- or
- b. At least two negative HIV virologic tests* from separate specimens, both of which were performed at greater than or equal to 1 month of age and one of which was performed at greater than or equal to 4 months of age

AND

c. No other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition)

or

Presumptive

A child who does not meet the above criteria for definitive "not infected" status but who has:

a. One negative EIA HIV antibody test performed at greater than or equal to 6 months of age and NO positive HIV virologic tests, if performed

or

b. One negative HIV virologic test* performed at greater than or equal to 4 months of age and NO positive HIV virologic tests, if performed

or

c. One positive HIV virologic test with at least two subsequent negative virologic tests****, at least one of which is at greater than or equal to 4 months of age; or negative HIV antibody test results, at least one of which is at greater than or equal to 6 months of age

AND

No other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition).

or

Clinical or Other Criteria (if the above definitive or presumptive laboratory criteria are not met)

Determined by a physician to be "not infected", and a physician has noted the results of the preceding HIV diagnostic tests in the medical record

AND

NO other laboratory or clinical evidence of HIV infection (i.e., has not had any positive virologic tests, if performed, and has not had an AIDS-defining condition)

IV. A child aged less than 18 months born to an HIV-infected mother will be categorized as having perinatal exposure to HIV infection if the child does not meet the criteria for HIV infection (II) or the criteria for "not infected with HIV" (III).

* Draft revised surveillance criteria for HIV infection were approved and recommended by the membership of the Council of State and Territorial Epidemiologists (CSTE) at the 1998 annual meeting (11). The state HIV/AIDS surveillance staffs, CDC, CSTE, and laboratory experts previously reviewed draft versions of these criteria. In addition, an expert panel of consultants reviewed the pediatric criteria. [External Pediatric Consultants: C. Hanson, M. Kaiser, S. Paul, G. Scott, and P. Thomas. CDC staff: J. Bertolli, K. Dominguez, M. Kalish, M.L. Lindegren, M. Rogers, C. Schable, R.J. Simonds, and J. Ward]

** Children aged greater than or equal to 18 months but less than 13 years are categorized as "not infected with HIV" if they meet the criteria in **III**.

*** In adults, adolescents, and children infected by other than perinatal exposure, plasma viral RNA nucleic acid tests should **NOT** be used in lieu of licensed HIV screening tests (e.g., repeatedly reactive enzyme immunoassay). In addition, a negative (i.e., undetectable) plasma HIV-1 RNA test result does not rule out the diagnosis of HIV infection.

**** HIV nucleic acid (DNA or RNA) detection tests are the virologic methods of choice to exclude infection in children aged less than 18 months. Although HIV culture can be used for this purpose, it is more complex and expensive to perform and is less well standardized than nucleic acid detection tests. The use of p24 antigen testing to exclude infection in children aged less than 18 months is not recommended because of its lack of sensitivity.

Appendix B

**Figure B1. Kansas AIDS Cases
By Year Reported and Year Diagnosed**

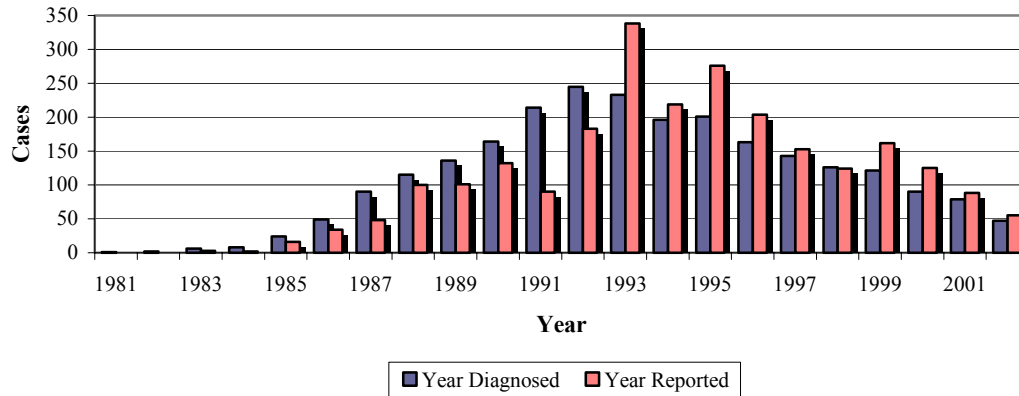


Table B1. Kansas AIDS Cases by Year Diagnosed and Gender

Year Diagnosed	Male	Female	
1981	1	0	
1982	2	0	
1983	6	0	
1984	8	0	
1985	24	0	
1986	43	6	
1987	82	8	
1988	108	7	
1989	131	5	
1990	149	15	
1991	197	17	
1992	219	26	
1993	213	20	
1994	178	18	
1995	173	28	
1996	139	24	
1997	132	11	
1998	110	16	
1999	103	18	
2000	75	15	
2001	69	10	
2002	40	7	
TOTAL	2,202	251	2,453

Table B2. Kansas AIDS Cases by Year of Diagnosis and Race/Ethnicity

	RACE/ETHNICITY					TOTAL
	WHITE	BLACK	HISPANIC	ASIAN/PACIFIC ISLANDER	NATIVE AMERICAN	
	N	N	N	N	N	
YEAR DIAGNOSED						
1981	1	0	0	0	0	1
1982	2	0	0	0	0	2
1983	6	0	0	0	0	6
1984	7	1	0	0	0	8
1985	22	1	1	0	0	24
1986	44	4	1	0	0	49
1987	69	14	6	1	0	90
1988	96	15	2	0	2	115
1989	113	18	5	0	0	136
1990	139	21	3	0	0	163
1991	165	36	11	1	1	214
1992	189	38	16	0	2	245
1993	180	30	15	1	7	233
1994	146	35	9	2	4	196
1995	149	42	8	1	1	201
1996	115	36	9	1	2	163
1997	103	27	11	1	1	143
1998	68	35	22	0	1	126
1999	85	22	11	1	1	120
2000	50	26	13	1	0	90
2001	43	23	11	1	1	79
2002	30	9	6	0	2	47
TOTAL	1,822	433	160	11	25	2,453*

*Includes 2 of unknown Race/Ethnicity

Appendix C

Table C1. Surveillance Summary of Reported AIDS Cases in Kansas and the U.S.

	KANSAS		U.S.*	
	ADULT/ADOLESCENT	PEDIATRIC	ADULT/ADOLESCENT	PEDIATRIC
PREVALENT CASES	1,003	5	382,614	2,292
CUMULATIVE DEATHS	1,438	7	501,669 Total	
CUMULATIVE CASES	2,441	12	849,780	9,220

*Based on Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report* 2002; 14: Tables 7,12,14.

Table C2. Cumulative AIDS Cases in Kansas and U.S. by Age at Diagnosis and Race/Ethnicity Reported as of 12/31/2002

	# OF KS AIDS CASES	#OF U.S. AIDS CASES*
AGE		
13 YEARS OLD OR YOUNGER	12	9,300
13-19 YEARS OLD	17	
20-29 YEARS OLD	529	
30-39 YEARS OLD	1,108	
40-49 YEARS OLD	565	
50 YEARS OLD OR OLDER	222	
TOTAL	2,453	
RACE/ETHNICITY		
WHITE	1,822	364,458
BLACK	433	347,491
HISPANIC	160	163,940
ASIAN/PACIFIC ISLANDER	11	6,924
NATIVE AMERICAN	25	2,875
UNKNOWN	2	887
TOTAL	2,453	886,575

*CDC point estimates 1999-2002.

Table C3. Surveillance Summary of Reported Cumulative and Prevalent HIV Cases in Kansas and the U.S.

	KANSAS		U.S.*	
	ADULT/ADOLESCENT	PEDIATRIC	ADULT/ADOLESCENT	PEDIATRIC
PREVALENT CASES	376	6	N/R	N/R
CUMULATIVE DEATHS	8	0	N/R	N/R
CUMULATIVE CASES	384	6	195,401	4,358

*National HIV statistics collected only from the 30 states that instituted name-based reporting by the end of 1998.
(N/R=no report)

Table C4. Cumulative HIV Cases in Kansas by Age of Diagnosis and Race/Ethnicity Reported as of 12/31/2002

	# OF KS HIV CASES	# OF US HIV CASES*
AGE		
13 YEARS OLD OR YOUNGER	6	3,219
13-19 YEARS OLD	19	
20-29 YEARS OLD	104	
30-39 YEARS OLD	159	
40-49 YEARS OLD	72	
50 YEARS OLD OR OLDER	30	
TOTAL	390	
RACE/ETHNICITY		
WHITE	224	115,134
BLACK	91	162,950
HISPANIC	48	29,315
ASIAN/PACIFIC ISLANDER	2	1,262
NATIVE AMERICAN	2	1,795
UNKNOWN	23	
TOTAL	390	310,456

*CDC point estimates 1999-2002.

Appendix D

Table D1. HIV/AIDS Deaths in Kansas in 2002 by Region	
REGION	2002 DEATHS
1	6
2	2
3	2
4	5
5	1
6	1
7	2
8	19
9	1
TOTAL	39
Cause of death not definitively related to HIV or AIDS	

Table D2. Cumulative HIV/AIDS Deaths in Kansas by Year of Death	
YEAR	TOTAL
1984	4
1985	13
1986	31
1987	56
1988	53
1989	77
1990	94
1991	124
1992	148
1993	145
1994	143
1995	165
1996	119
1997	66
1998	36
1999	55
2000	31
2001	42
2002	39
2003	11
TOTAL	1,452
Cause of death not definitively related to HIV or AIDS	